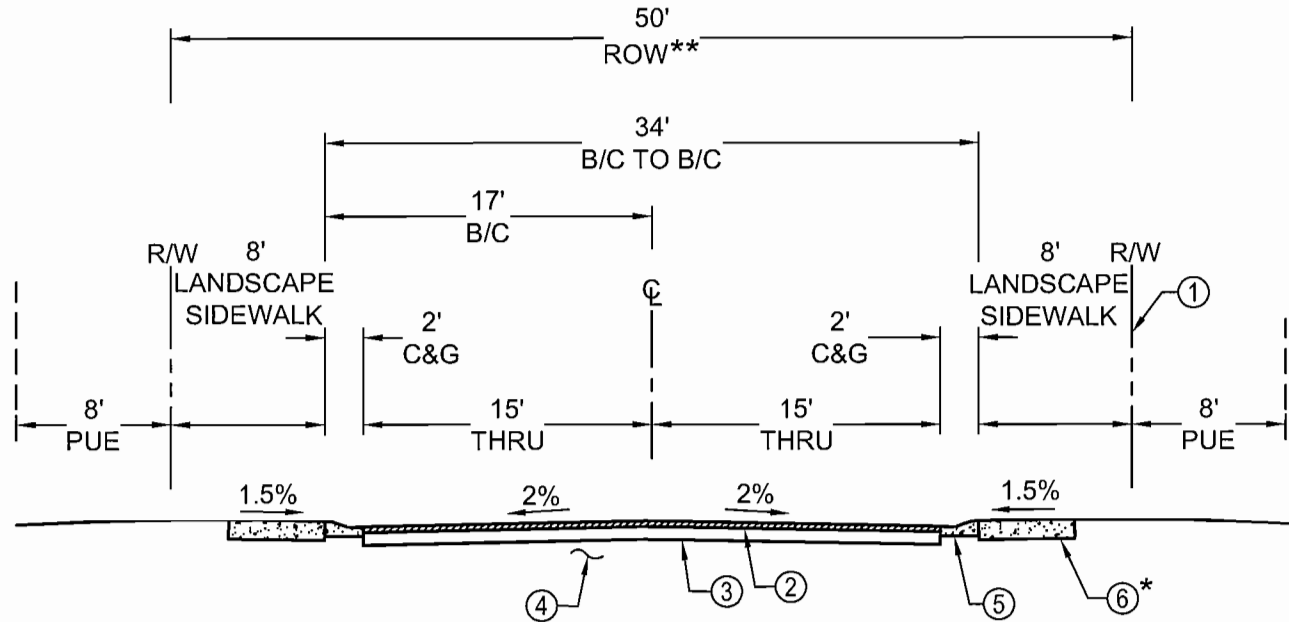


TYPICAL STREET SECTION 50-FT RIGHT-OF-WAY



① THE CITY ENGINEER RESERVES THE RIGHT TO MODIFY THIS RIGHT-OF-WAY BASED ON THE SPECIFIC NEEDS OF THE LOCAL STREET.

② ASPHALTIC CONCRETE PAVEMENT:

A. THE THICKNESS SHALL BE A MINIMUM OF 2.5" AND SHALL CONSIST OF ONE LIFT

B. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS. 321 AND 710.

③ BASE COURSE SHALL BE 9" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SEC.'S 310 AND 702.

**PER ARIZONA REVISED STATUTES TURF IS NOT ALLOWED IN RIGHT OF WAY.

④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.

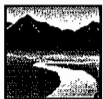
⑤ CONCRETE ROLL CURB PER MAG STD. DET. 220, TYPE C. VERTICAL CURB & GUTTER PER MAG STD. DET. 220 TYPE A MAY BE UTILIZED TO CONVEY STORMWATER AS NECESSARY.

⑥ 5-FT ATTACHED CONCRETE SIDEWALK.

*ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

A1000



**CITY OF AVONDALE
STANDARD DETAIL**

**LOCAL STREET
SECTION**

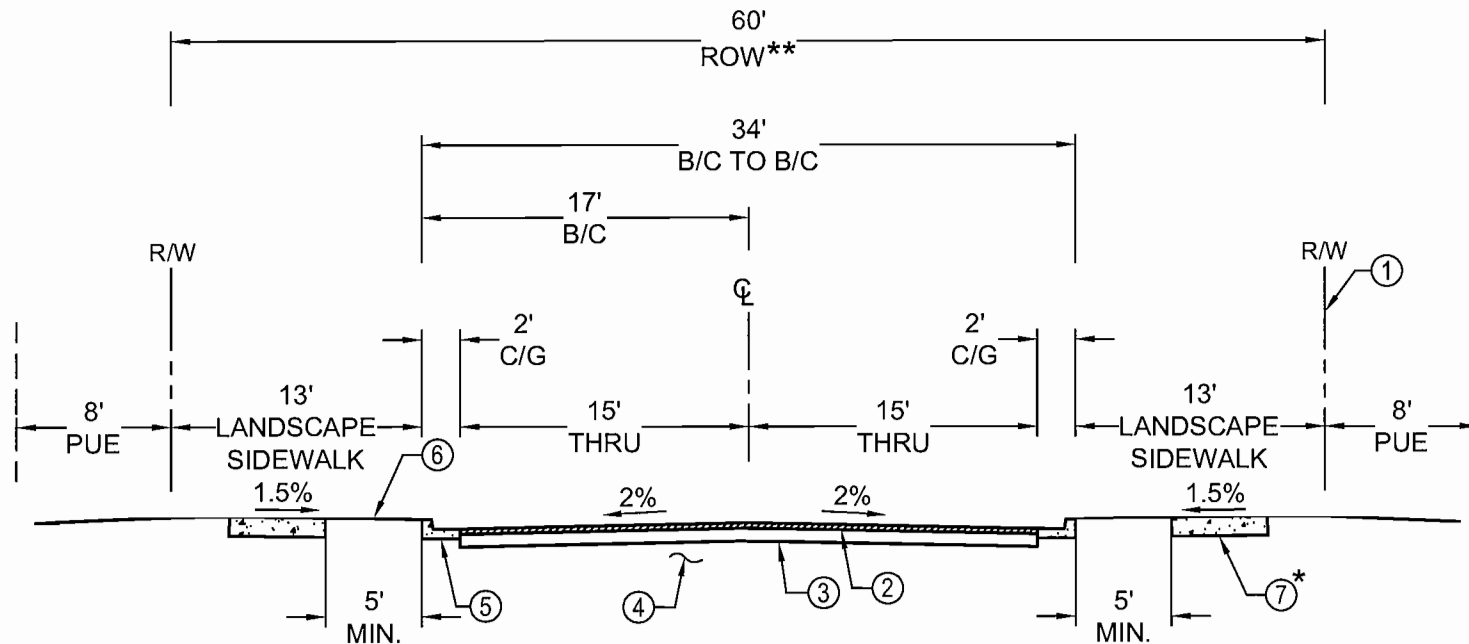
APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08

TYPICAL STREET SECTION 60-FT RIGHT-OF-WAY



① THE CITY ENGINEER RESERVES THE RIGHT TO MODIFY THIS RIGHT-OF-WAY BASED ON THE SPECIFIC NEEDS OF THE LOCAL STREET.

② ASPHALTIC CONCRETE PAVEMENT:

A. THE THICKNESS SHALL BE A MINIMUM OF 2.5" AND SHALL CONSIST OF 1 LIFT.

B. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 321 AND 710.

③ BASE COURSE SHALL BE 9" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 310 AND 702.

④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.

⑤ 6" VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A.

⑥ STREETSCAPE ZONE. DESIGN MUST BE APPROVED BY CITY STAFF AND MEET ALL SIGHT DISTANCE REQUIREMENTS.

⑦ 5-FT DETACHED CONCRETE SIDEWALK.

** PER ARIZONA REVISED STATUTES TURF IS NOT ALLOWED IN THE RIGHT OF WAY

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

A1001



**CITY OF AVONDALE
STANDARD DETAIL**

LOCAL STREETSCAPE SECTION

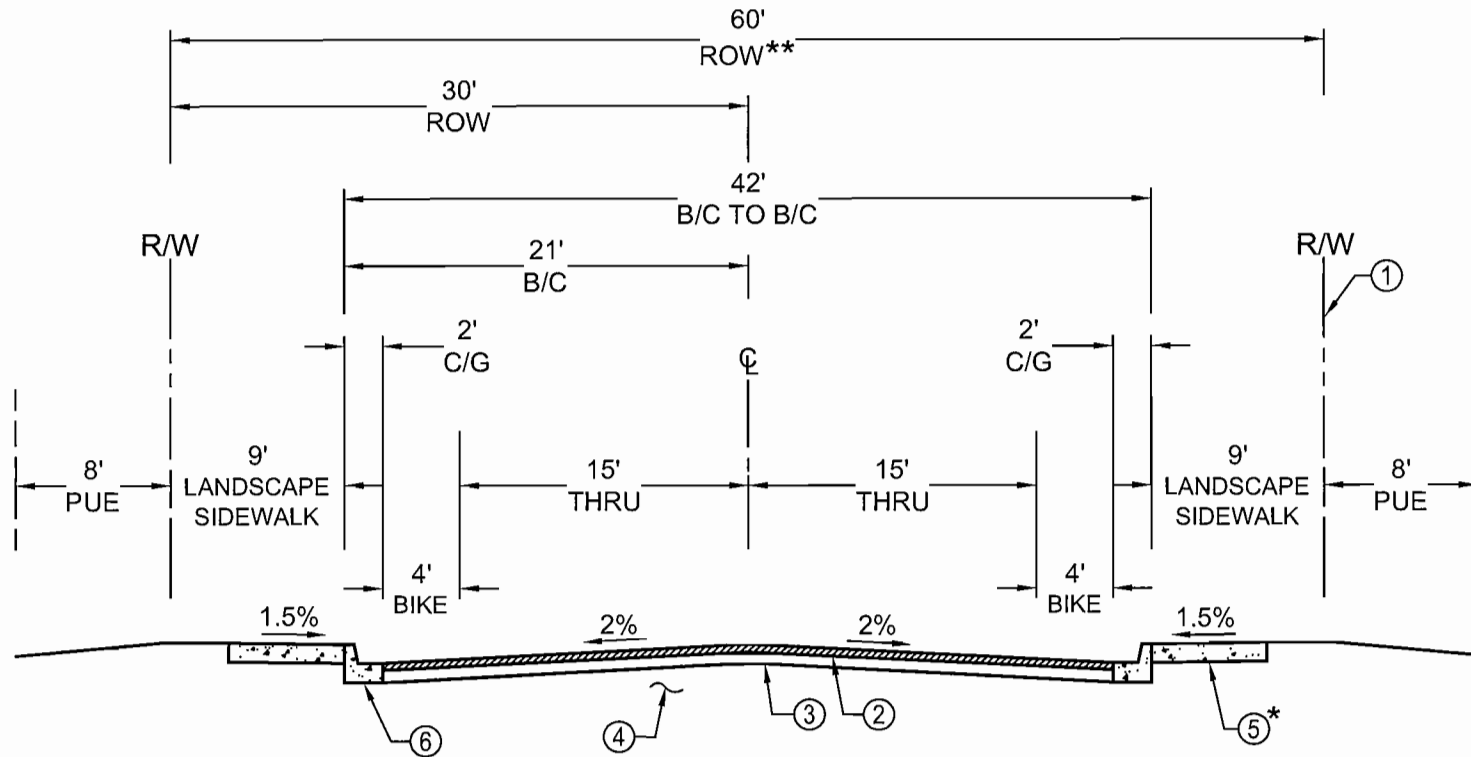
APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08

TYPICAL STREET SECTION 60-FT RIGHT-OF-WAY NO PARKING



① ADDITIONAL RIGHT-OF-WAY SHALL BE PROVIDED WHERE NECESSARY TO ACCOMMODATE DUAL LEFT TURN LANES, RIGHT TURN LANES, TRANSIT STOPS AND/OR PEDESTRIAN REFUGE AREAS.

② ASPHALTIC CONCRETE PAVEMENT:

- A. THE THICKNESS SHALL BE A MINIMUM OF 5" AND SHALL CONSIST OF 2 LIFTS.
- B. ALL CONSTRUCTION MATERIAL SHALL CONFORM TO MAG STANDARDS SPECIFICATIONS, SECTIONS 321 AND 710.

③ BASE COURSE SHALL BE 12" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 310 AND 702.

④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARDS SPECIFICATIONS, SECTION 301.

⑤ 6-FT ATTACHED CONCRETE SIDEWALK.

⑥ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A

**PER ARIZONA REVISED STATUTE TURF IS NOT ALLOWED IN THE RIGHT OF WAY.

*ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

A1002



**CITY OF AVONDALE
STANDARD DETAIL**

**INDUSTRIAL COLLECTOR
SECTION**

APPROVED BY:

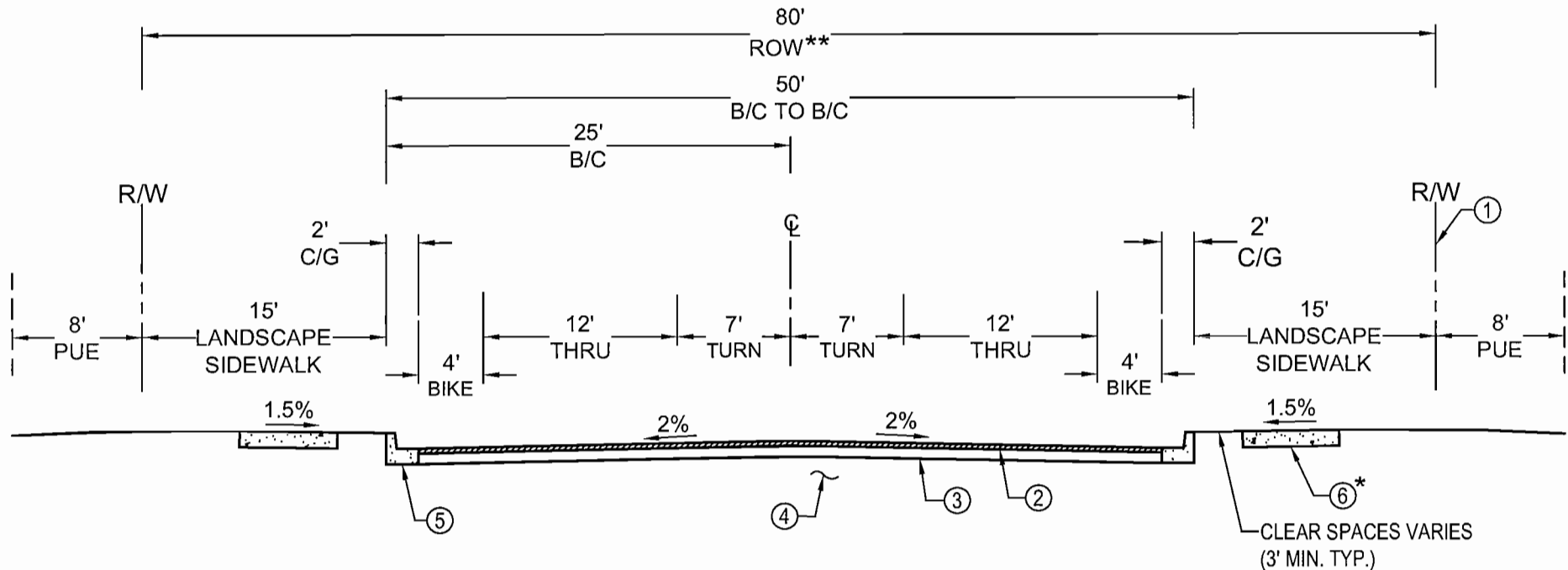
Daniel W. Fitzhugh

DATE:

04-07-08

TYPICAL STREET SECTION 80-FT RIGHT-OF-WAY

NO PARKING



- ① ADDITIONAL RIGHT-OF-WAY SHALL BE PROVIDED WHERE NECESSARY TO ACCOMMODATE DUAL LEFT TURN LANES, RIGHT TURN LANES, TRANSIT STOPS AND/OR PEDESTRIAN REFUGE AREAS.
- ② ASPHALTIC CONCRETE PAVEMENT:
 - A. THE THICKNESS SHALL BE A MINIMUM OF 3.5" AND SHALL CONSIST OF 2 LIFTS.
 - B. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 321 AND 710
- ③ BASE COURSE SHALL BE 10" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 310 TO 702.

- ④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.
- ⑤ 6" CONCRETE VERTICAL CURB & GUTTER PER MAG DETAIL 220, TYPE A.
- ⑥ 6-FT MEANDERING CONCRETE SIDEWALK.

** PER ARIZONA REVISED STATUTES TURF IS NOT ALLOWED IN RIGHT OF WAY.

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

A1003



**CITY OF AVONDALE
STANDARD DETAIL**

**MINOR COLLECTOR
SECTION**

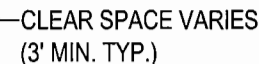
APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08

NO PARKING



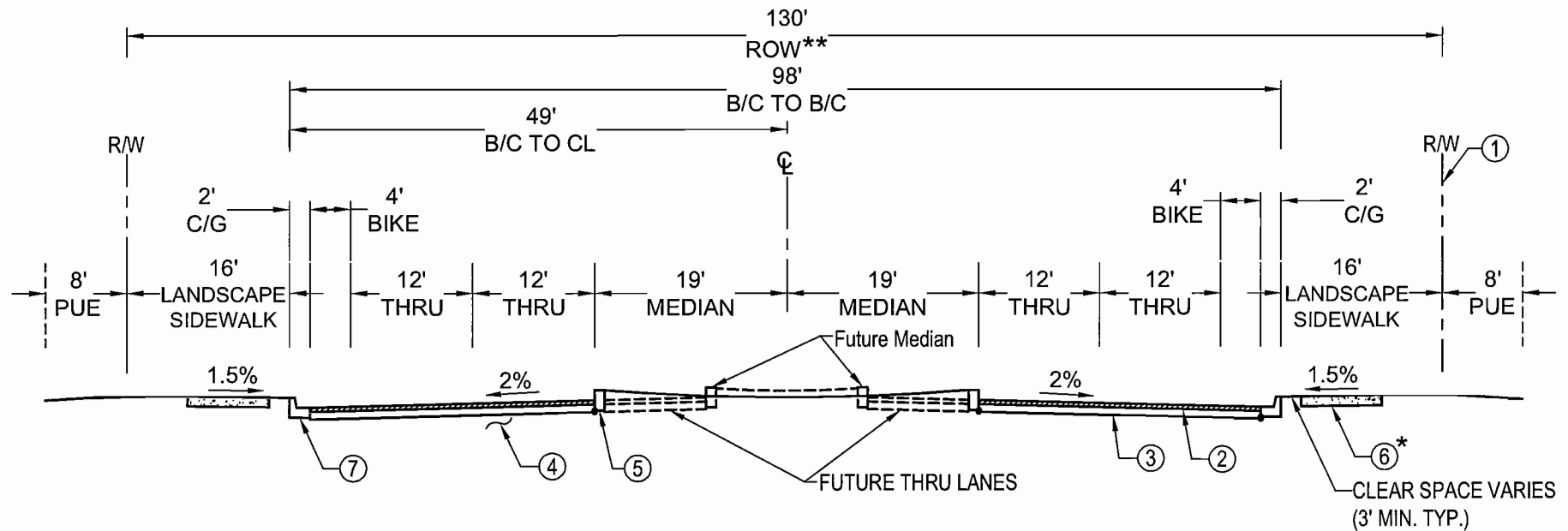
- ④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.
- ⑤ 6-FT MEANDERING CONCRETE SIDEWALK.
- ⑥ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A
- ⑦ A RAISED MEDIAN OPTION MAY BE IMPLEMENTED WHERE APPROVED BY CITY STAFF. IT REQUIRES A WIDER MEDIAN WITH REDUCED THRU LANES (SEE DIMENSIONS BELOW STREET SECTION).

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DATE:

04-07-08

TYPICAL STREET SECTION 130-FT RIGHT-OF-WAY NO PARKING



① ADDITIONAL RIGHT-OF-WAY SHALL BE PROVIDED WHERE NECESSARY TO ACCOMMODATE DUAL LEFT TURN LANES, RIGHT TURN LANES, TRANSIT STOPS AND/OR PEDESTRIAN REFUGE AREAS.

② ASPHALTIC CONCRETE PAVEMENT:

- A. THE THICKNESS SHALL BE A MINIMUM OF 5" AND SHALL CONSIST OF 2 LIFTS.
- B. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 321 AND 710

③ BASE COURSE SHALL BE 12" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 310 AND 702.

④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SEC. 301.

⑤ CONCRETE SINGLE CURB PER STD. DET. 222, TYPE A.

⑥ 8-FT MEANDERING CONCRETE SIDEWALK.

⑦ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A.

** PER ARIZONA REVISED STATUTES NO TURF IS ALLOWED IN THE RIGHT OF WAY.

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

A1005



**CITY OF AVONDALE
STANDARD DETAIL**

**PHASED ARTERIAL SECTION
(INSIDE)**

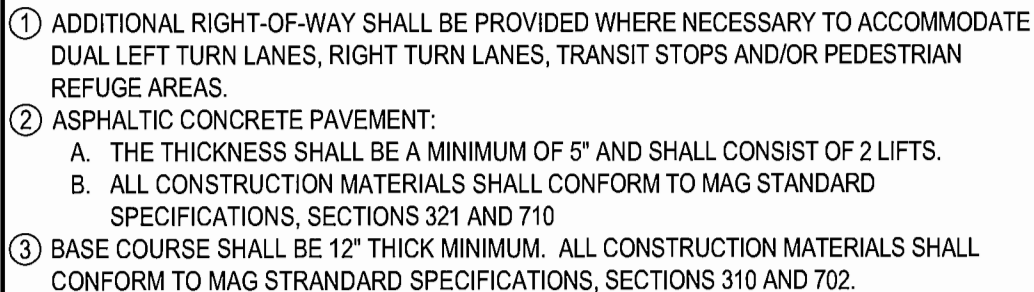
APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08

NO PARKING



- ④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.
- ⑤ 8-FT MEANDERING CONCRETE SIDEWALK.
- ⑥ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A
- ⑦ A CENTER PAVED OPTION MAY BE IMPLEMENTED BY CITY STAFF. IT REQUIRES A 16' TWO WAY LEFT TURN LANE STRIPING SCHEME (SEE DIMENSIONS BELOW STREET SECTION).

** PER ARIZONA REVISED STATUTES NO TURF IS ALLOWED IN THE RIGHT OF WAY.

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

A1006



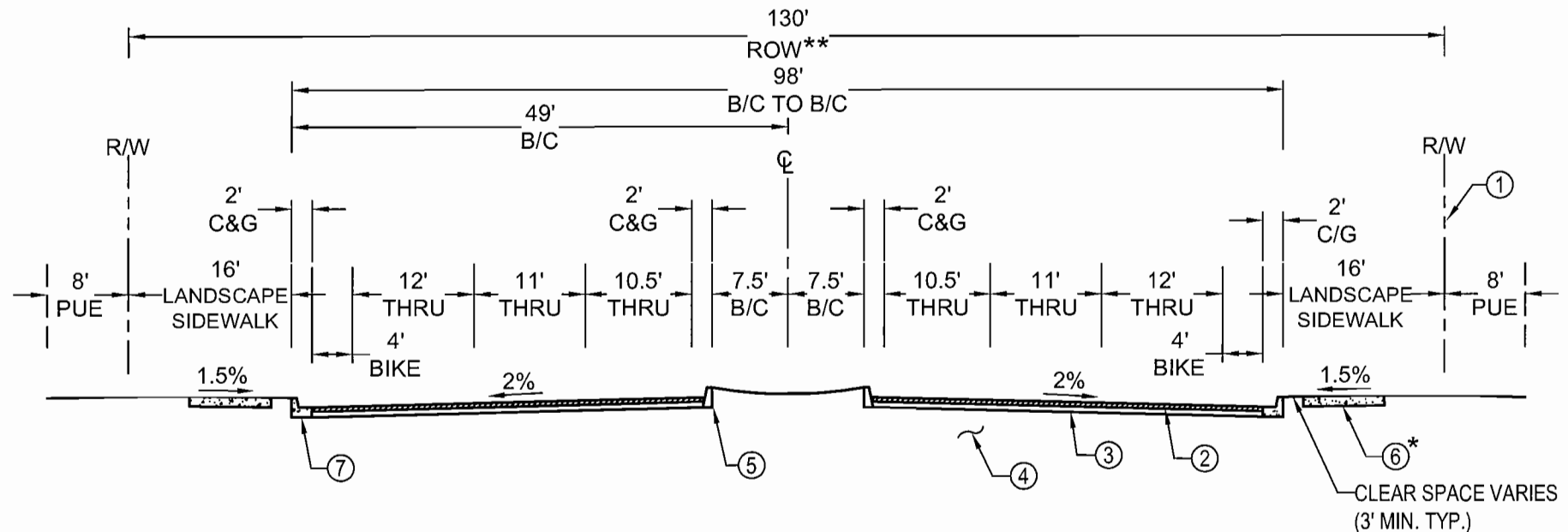
CITY OF AVONDALE
STANDARD DETAIL

PHASED ARTERIAL SECTION (OUTSIDE)

DATE:

04-07-08

TYPICAL STREET SECTION
130-FT RIGHT-OF-WAY
6 LANE SECTION
NO PARKING



- ① ADDITIONAL RIGHT-OF-WAY SHALL BE PROVIDED WHERE NECESSARY TO ACCOMMODATE DUAL LEFT TURN LANES, RIGHT TURN LANES, TRANSIT STOPS AND/OR PEDESTRIAN REFUGE AREAS.
- ② ASPHALTIC CONCRETE PAVEMENT:
 - A. THE THICKNESS SHALL BE A MINIMUM OF 5" AND SHALL CONSIST OF 2 LIFTS.
 - B. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 321 AND 710
- ③ BASE COURSE SHALL BE 12" THICK MINIMUM. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO MAG STANDARD SPECIFICATIONS, SECTIONS 310 AND 702.

- ④ THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH MAG STANDARD SPECIFICATIONS, SECTION 301.
- ⑤ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A.
- ⑥ 8-FT MEANDERING CONCRETE SIDEWALK.
- ⑦ CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220, TYPE A

** PER ARIZONA REVISED STATUTES NO TURF IS ALLOWED IN THE RIGHT OF WAY.

* ALL SIDEWALKS ABUTTING SCHOOLS SHALL BE 10-FT WIDE MINIMUM.

DETAIL NO.

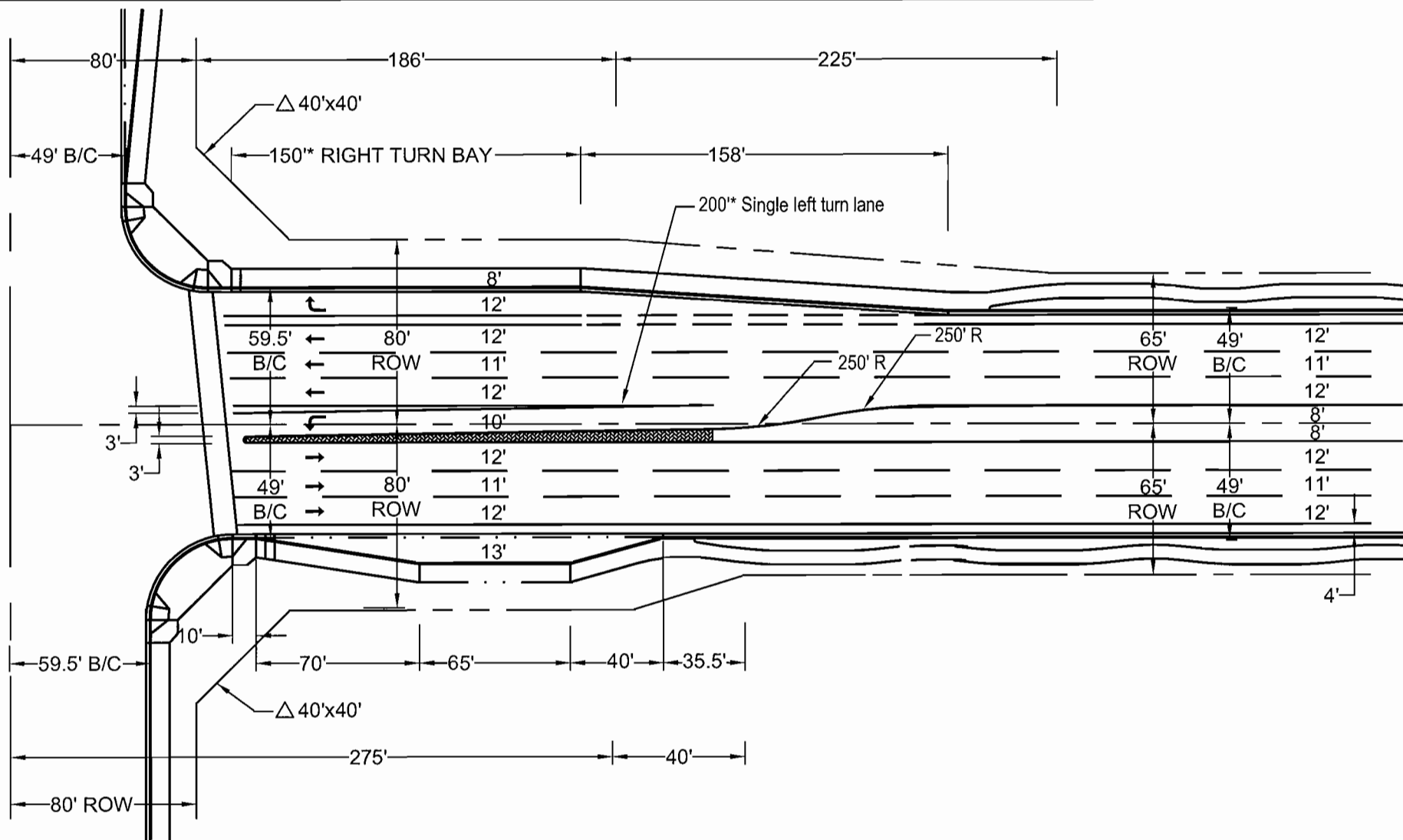
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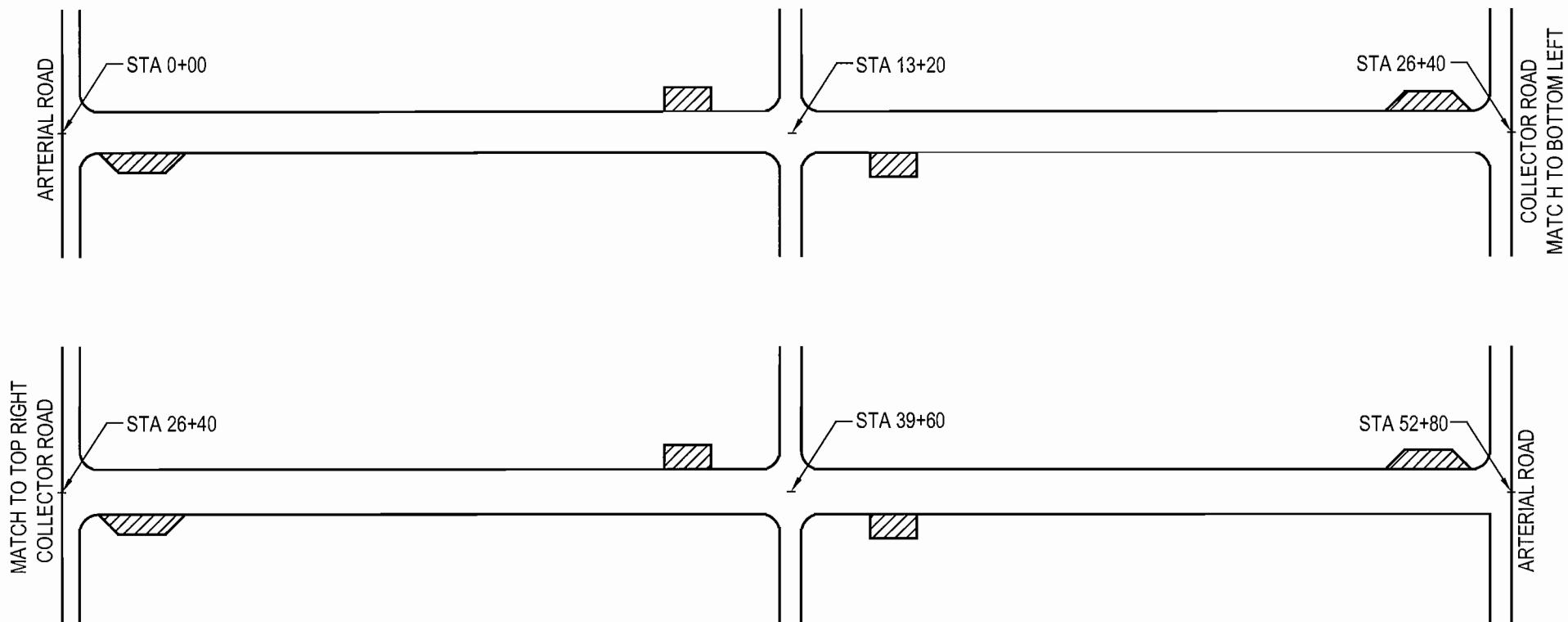
CITY OF AVONDALE
STANDARD DETAIL

ARTERIAL SECTION

APPROVED BY: Daniel W. Fitzhugh
DATE: 04-07-08



NOTE: ALL DIMENSIONS TO FACE OF CURB UNLESS NOTED. *LONGER STORAGE MAY BE REQUIRED BASED ON THE TRAFFIC STUDY.



NOTES:

1. BUS STOPS SHALL BE STRATEGICALLY PLACED EVERY 1/4 MILE ON ARTERIAL AND MAJOR COLLECTOR STREETS.
2. ONE MILE AND ONE HALF MILE STOPS SHALL BE PER COA STD. DET. A1260
3. QUARTER MILE AND EIGHTH MILE (IF WARRANTED) STOPS SHALL BE PER COA STD. DET. A1261 ONLY.
4. ADDITIONAL BUS STOPS MAY BE ADDED, AND SPACING ARE SUBJECT TO CHANGE BASED ON THE DIRECTION OF THE CITY ENGINEER.

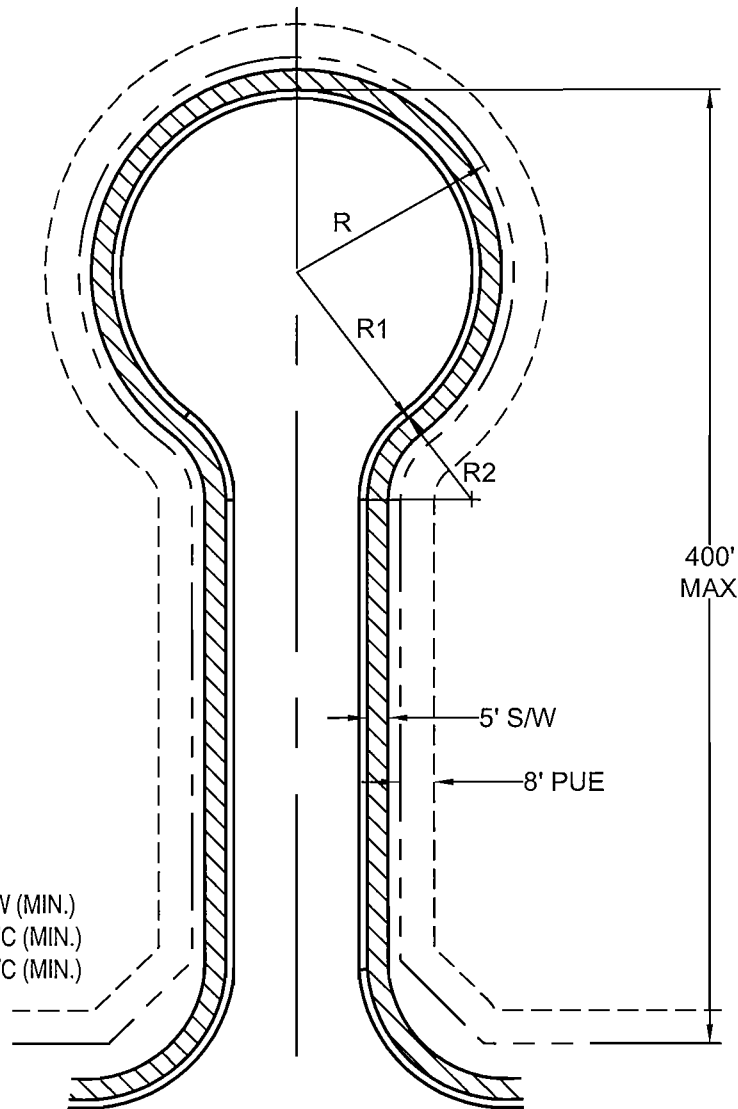
DETAIL NO.
A1012



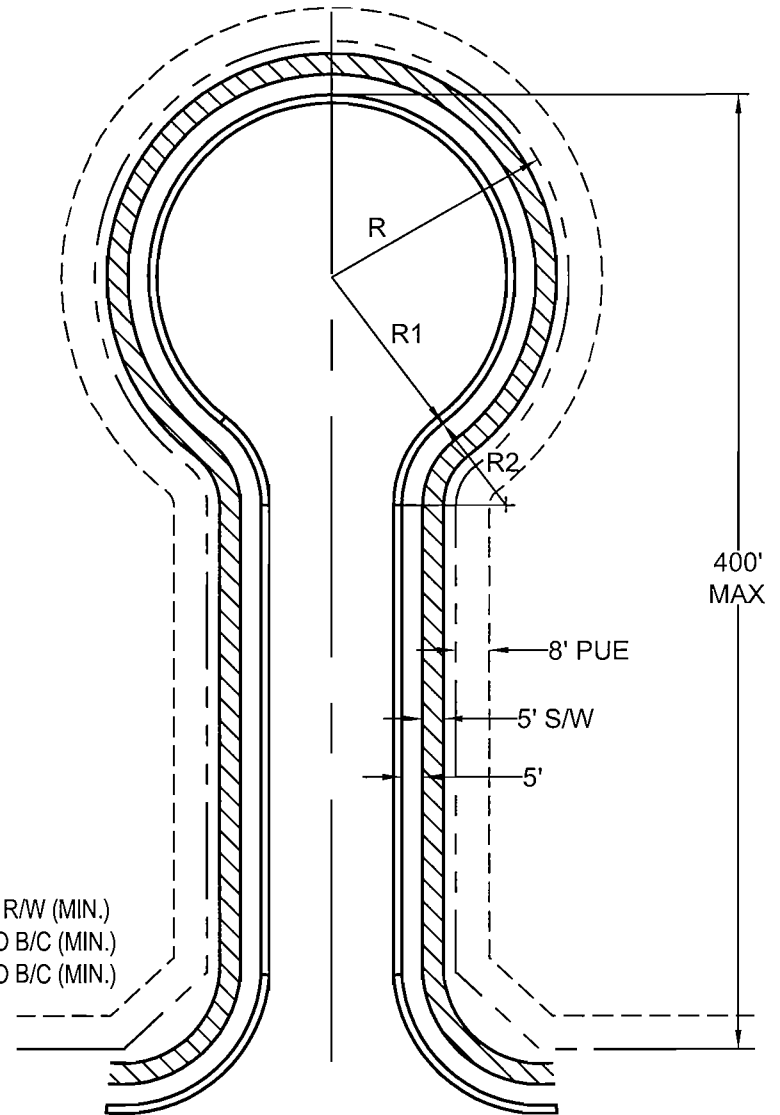
**CITY OF AVONDALE
STANDARD DETAIL**

DESIGNATED BUS STOP LOCATIONS

APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



LOCAL STREET



LOCAL STREETSCAPE

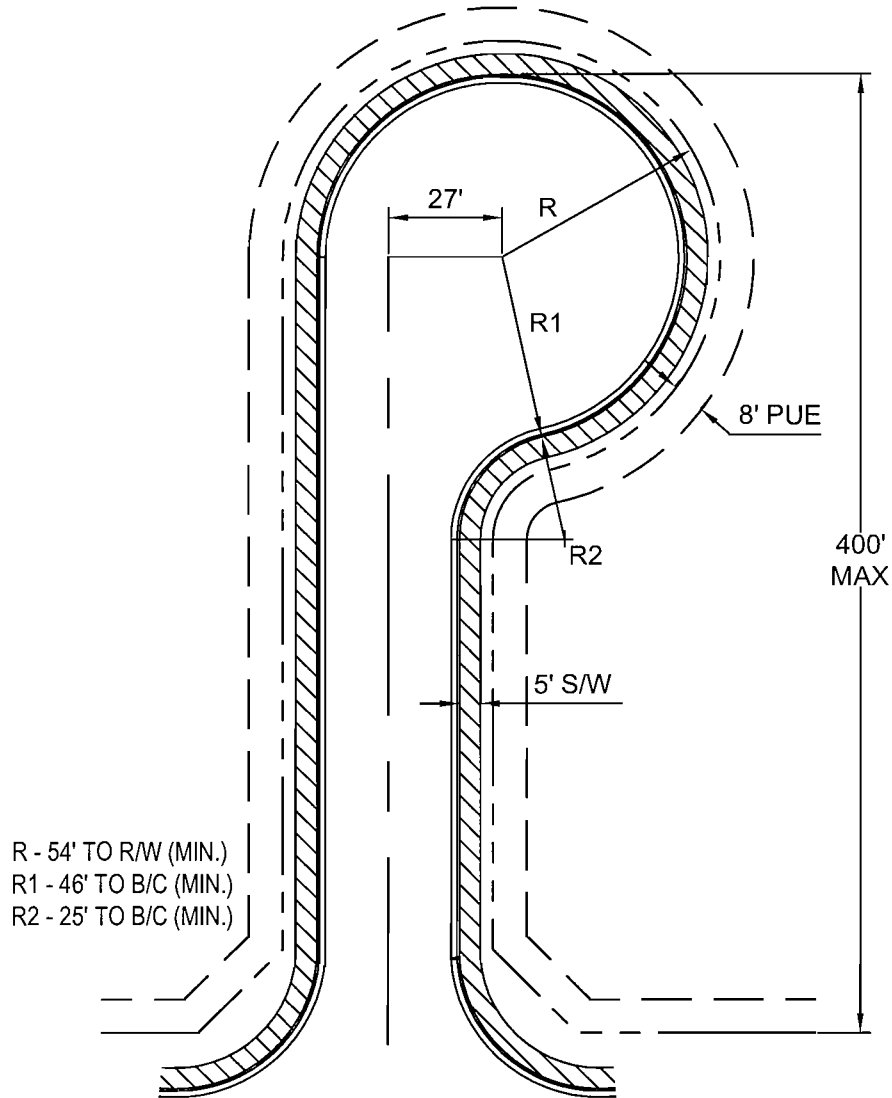
DETAIL NO.
A1015



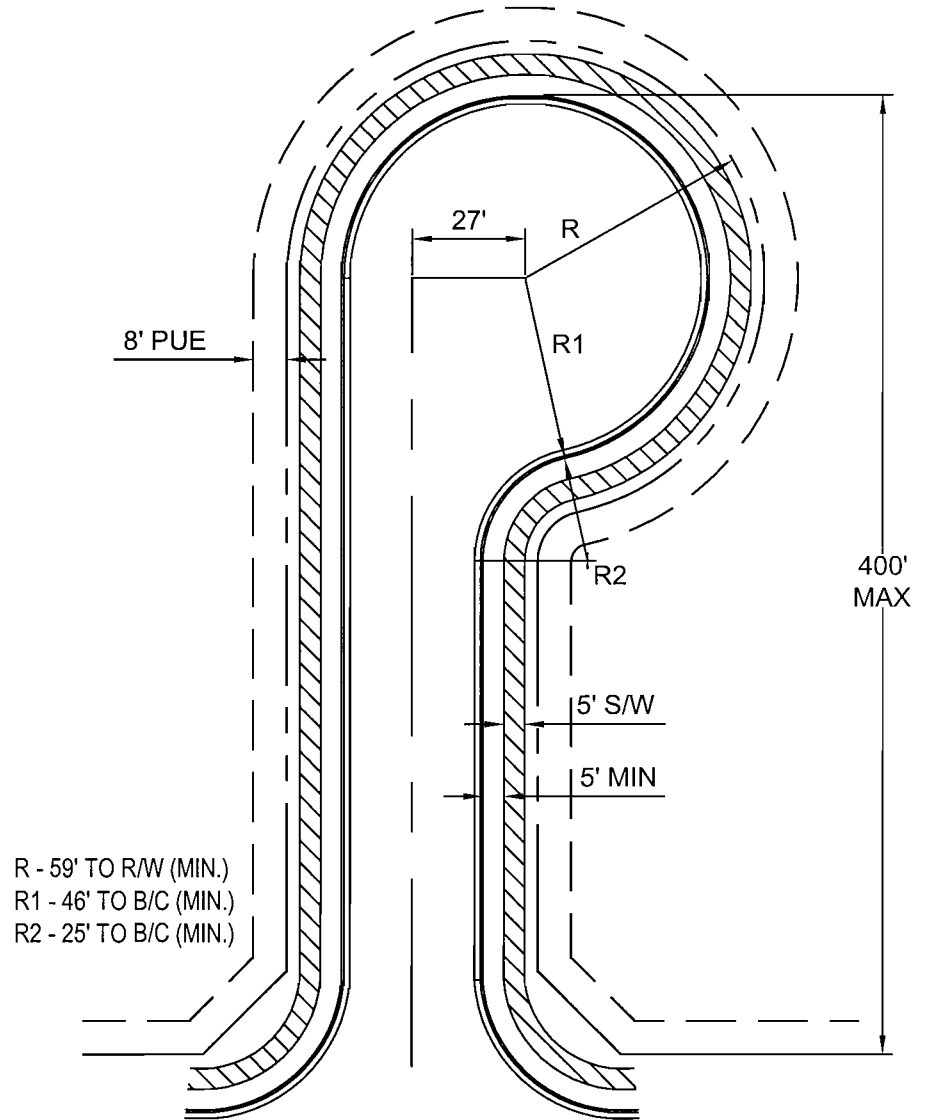
CITY OF AVONDALE
STANDARD DETAIL

CUL-DE-SAC (CENTERED)

APPROVED BY:
Daniel W. Fitzgough
DATE:
04-07-08



LOCAL STREET



LOCAL STREETSCAPE

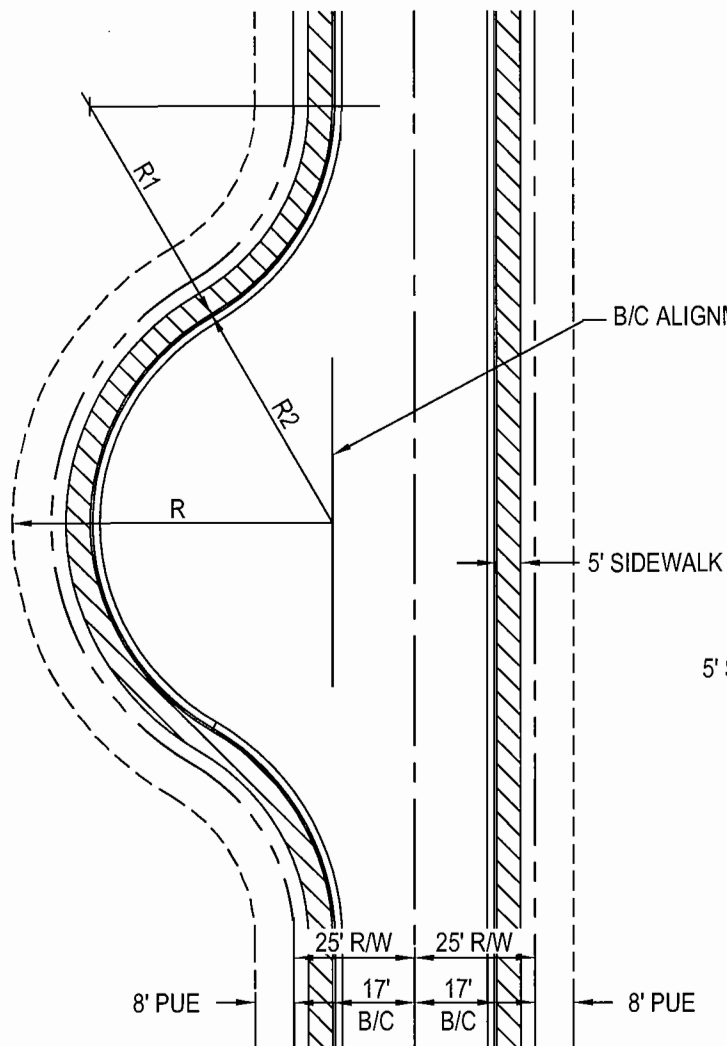
DETAIL NO.
A1016



CITY OF AVONDALE
 STANDARD DETAIL

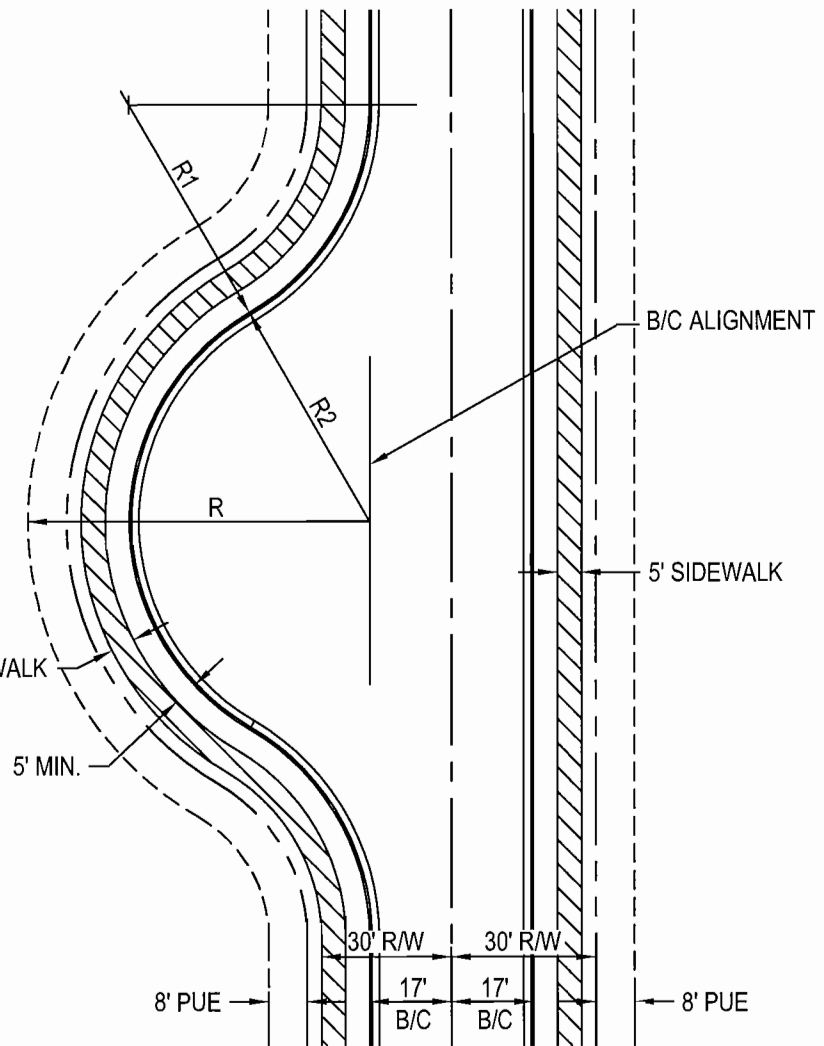
CUL-DE-SAC (OFFSET)

APPROVED BY:
Daniel W. Fitzhugh
 DATE: 04-07-08



R - 58' TO R/W (MIN.)
 R1 - 50' TO B/C (MIN.)
 R2 - 50' TO B/C (MIN.)

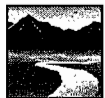
LOCAL STREET



R - 63' TO R/W (MIN.)
 R1 - 50' TO B/C (MIN.)
 R2 - 50' TO B/C (MIN.)

LOCAL STREETSCAPE

DETAIL NO.
A1017

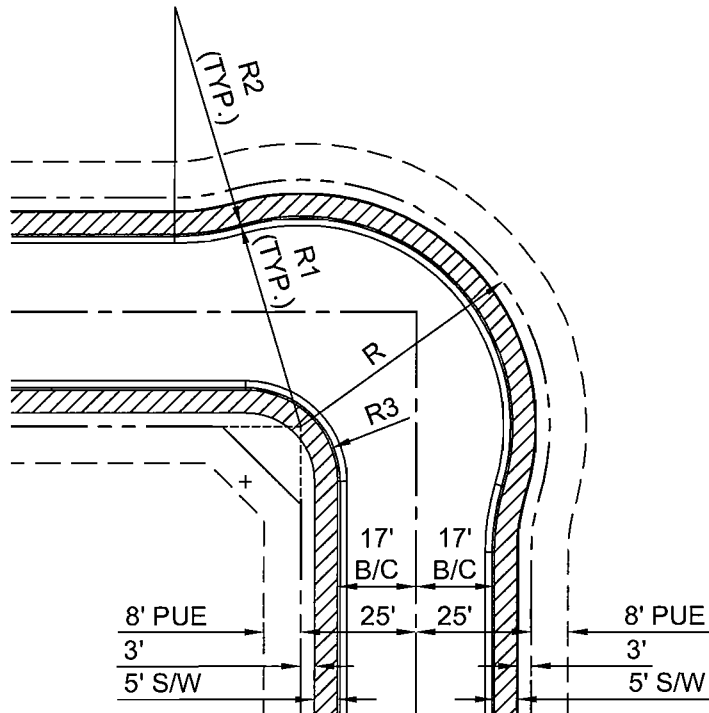


CITY OF AVONDALE
STANDARD DETAIL

BIRDSEYE

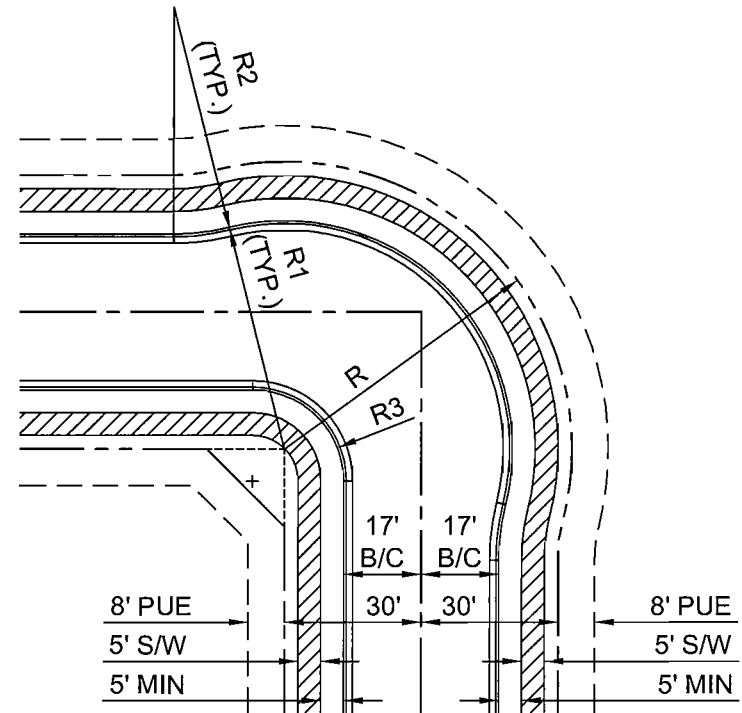
APPROVED BY:

Daniel W. Fitzhugh
 DATE: 04-07-08



R - 54' TO R/W (MIN.)
 R1 - 46' TO B/C (MIN.)
 R2 - 50' TO B/C (MIN.)
 R3 - 20' TO B/C (MIN.)

LOCAL STREET

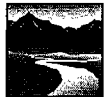


R - 63' TO R/W (MIN.)
 R1 - 50' TO B/C (MIN.)
 R2 - 50' TO B/C (MIN.)
 R3 - 20' TO B/C (MIN.)

LOCAL STREETSCAPE

DETAIL NO.

A1018



**CITY OF AVONDALE
 STANDARD DETAIL**

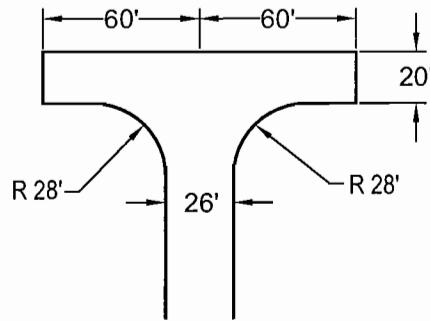
KNUCKLE

APPROVED BY:

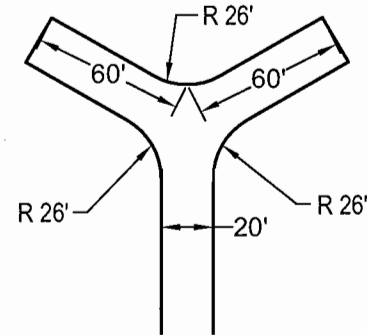
Daniel W. Fitzhugh

DATE:

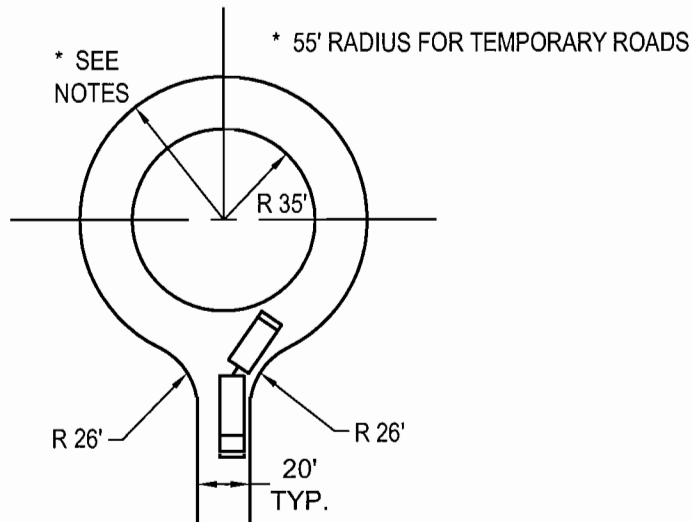
04-07-08



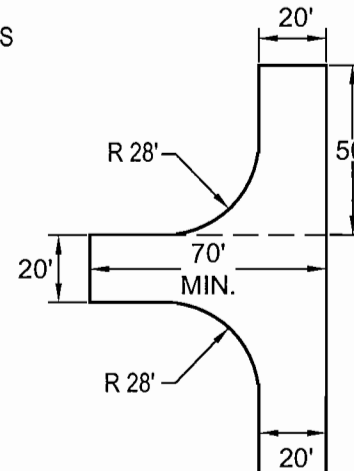
120'
HAMMERHEAD



ACCEPTABLE ALTERNATE
TO 120' HAMMERHEAD



110'
CUL-DE-SAC



ACCEPTABLE ALTERNATE
TO 120' HAMMERHEAD

NOTE: SIGNING AND MARKINGS FOR "NO PARKING" AND "TURN AROUND ONLY" SHALL BE REQUIRED.

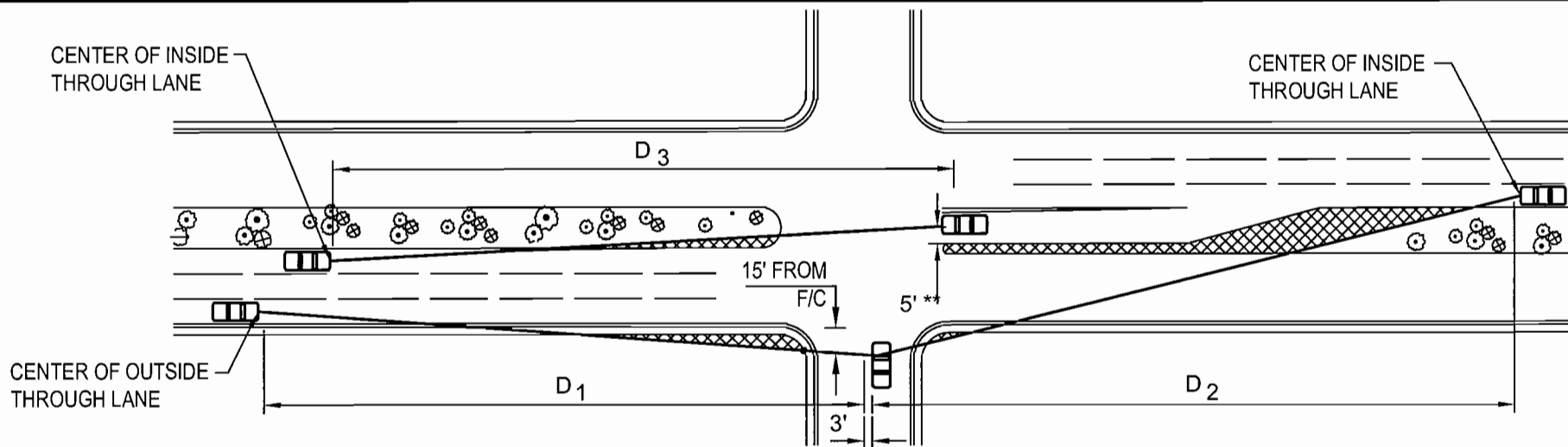
DETAIL NO.
A1019



**CITY OF AVONDALE
STANDARD DETAIL**

**TEMPORARY TURN
AROUNDS**

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08



* DESIGN SPEED IS POSTED SPEED LIMIT PLUS FIVE (5) MPH. FOR ARTERIALS AND COLLECTORS DESIGN SPEED SHALL NOT BE LESS THAN 30 MPH.

** 5 FEET MEASURED TO NEAREST LANE LINE OR CENTER LINE.

NOTES:

1. DETAIL PERTAINS TO ALL INTERSECTIONS AND TO COMMERCIAL/SHOPPING CENTER DRIVEWAYS.
2. INCREASED SIGHT VISIBILITY TRIANGLES MAY BE REQUIRED THROUGH HORIZONTAL AND VERTICAL CURVES PER AASHTO.
3. FOR HALF STREET, PHASED, OR PARTIAL IMPROVEMENTS, SIGHT DISTANCE SHOULD BE BASED ON ULTIMATE CONDITIONS.

TWO LANE STREET			
DESIGN SPEED*	RIGHT TURN OR CROSSING MOVEMENT D ₁ (FEET)	LEFT TURN ONTO THRU D ₂ (FEET)	LEFT TURN FROM THRU D ₃ (FEET)
30	290	335	245
35	335	390	285
40	385	445	325
45	430	500	365
50	480	555	405



GROUND COVER, FLOWERS, AND GRANITE LESS THAN 24" (MATURE) IN HEIGHT, OR TREES TRIMMED TO 7' CLEARANCE ABOVE FINISHED GRADE ALLOWED IN THIS AREA.

VALUES FOR D ARE BASED ON 2004 AASHTO INTERSECTION SIGHT DISTANCE GUIDELINES.

FOUR LANE STREET			
DESIGN SPEED*	RIGHT TURN OR CROSSING MOVEMENT D ₁ (FEET)	LEFT TURN ONTO THRU D ₂ (FEET)	LEFT TURN FROM THRU D ₃ (FEET)
30	355	400	310
35	415	465	365
40	475	530	415
45	530	600	465
50	590	665	515
55	650	730	570

FIVE OR SIX LANE STREET			
DESIGN SPEED*	RIGHT TURN OR CROSSING MOVEMENT D ₁ (FEET)	LEFT TURN ONTO THRU D ₂ (FEET)	LEFT TURN FROM THRU D ₃ (FEET)
30	420	420	335
35	490	490	390
40	560	560	445
45	630	630	500
50	700	700	555
55	770	770	610

DETAIL NO.

A1020

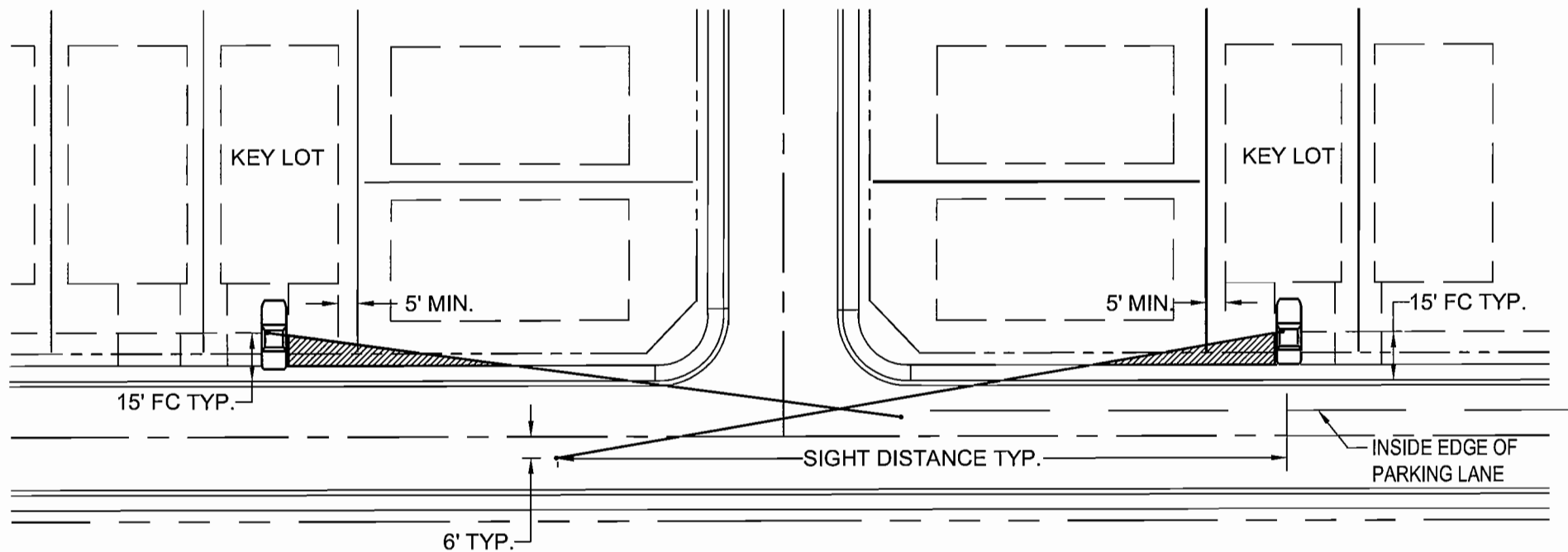


**CITY OF AVONDALE
STANDARD DETAIL**


**SIGHT DISTANCE REQUIREMENTS FOR
ARTERIAL AND COLLECTOR STREETS**

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



NOTES:

1. CITY OF AVONDALE ALLOWS THE DRIVEWAY TO BE WITHIN 5' OF ADJACENT BACK WALL.
2.  NO STRUCTURES OR LANDSCAPING ABOVE 24" IN HEIGHT ALLOWED IN THIS AREA EXCEPT TREES WITH BRANCHES NOT LESS THAN 7' ABOVE THE GROUND.

STREET	DESIGN SPEED	SIGHT DISTANCE
LOCAL	30 MPH	290 FEET
MINOR COLLECTOR	35 MPH	335 FEET

DETAIL NO.

A1022

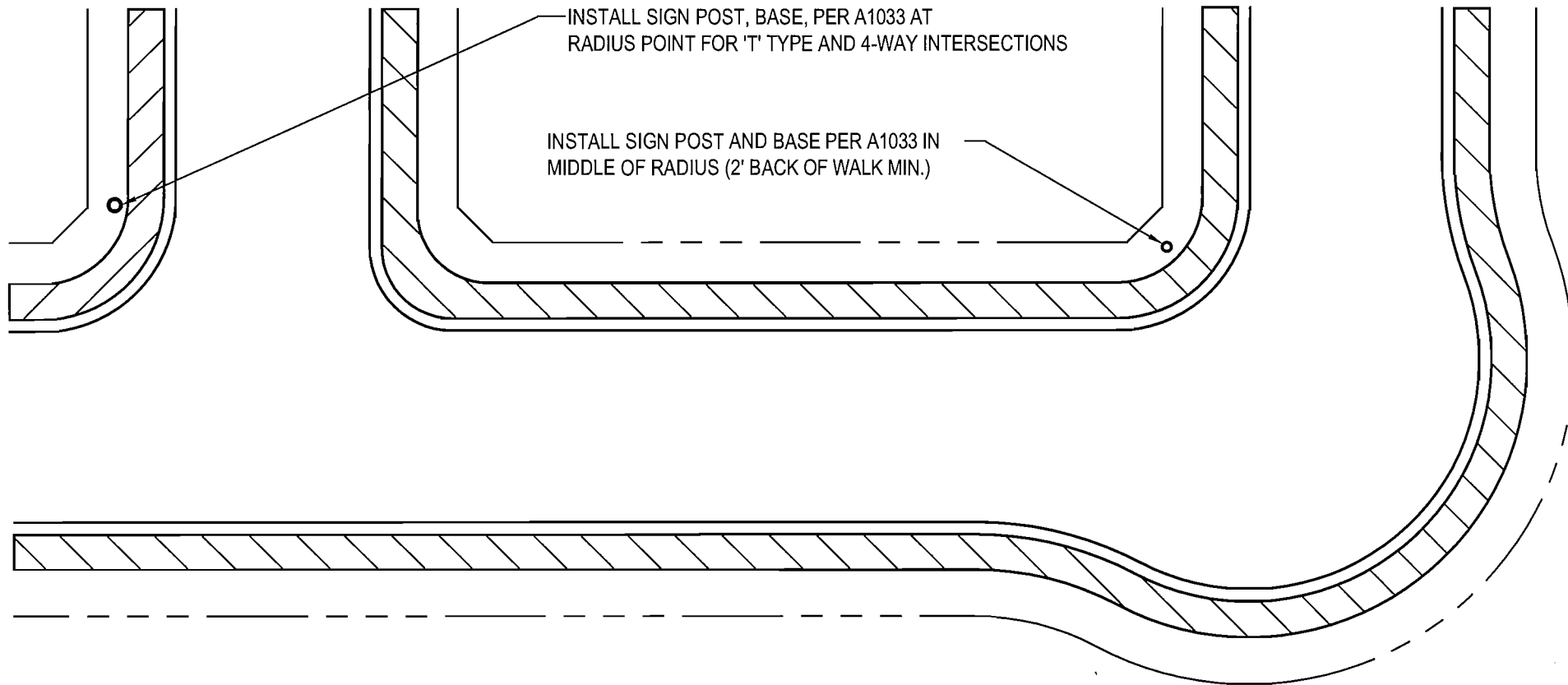


**CITY OF AVONDALE
STANDARD DETAIL**

KEY LOT SIGHT DISTANCE

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



DETAIL NO.

A1030



**CITY OF AVONDALE
STANDARD DETAIL**

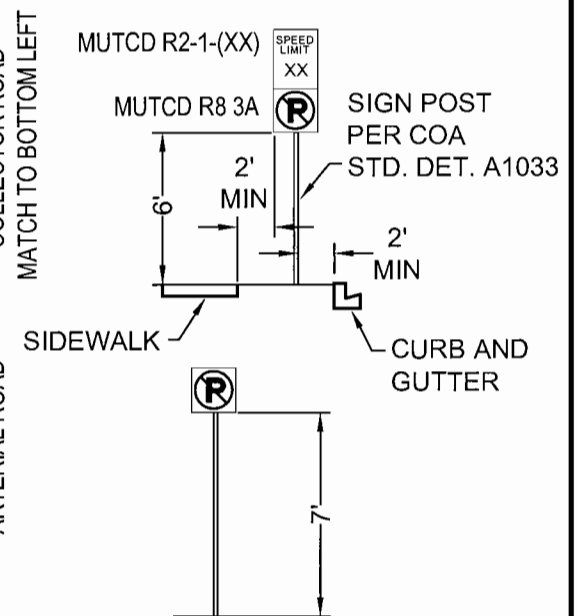
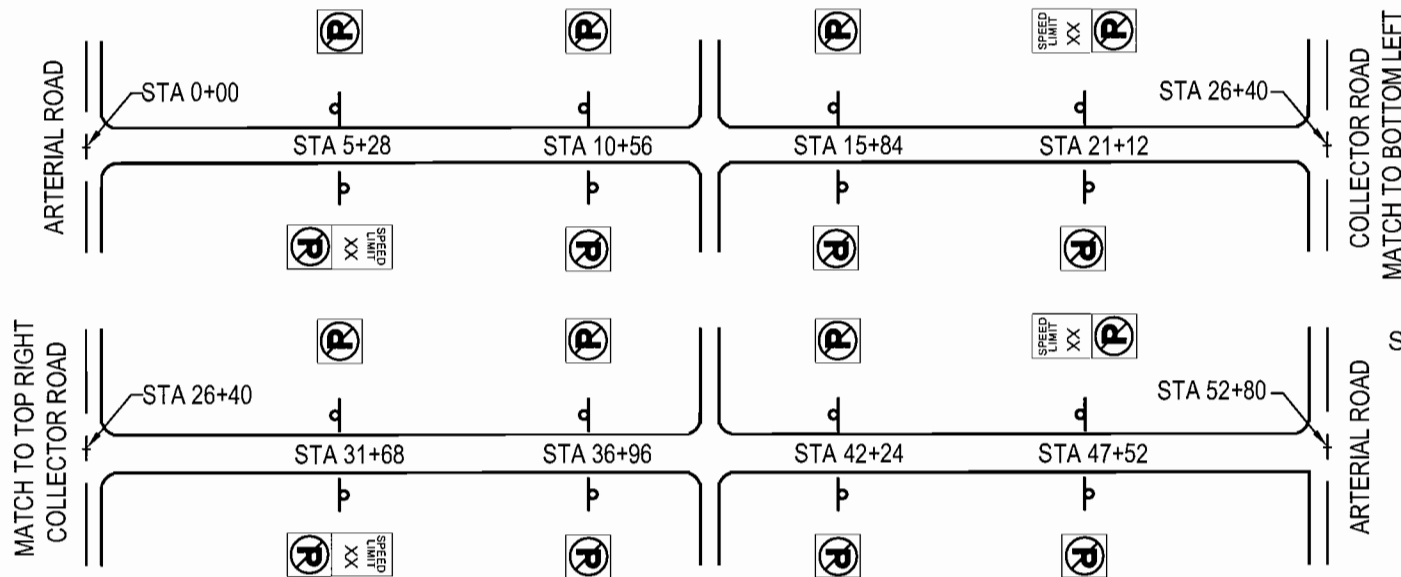
SIGN LOCATIONS ON LOCAL STREETS

APPROVED BY:

Daniel W. Fitzgugh

DATE:

04-07-08



NOTES:

1. SIGNING SHOWN ONLY REPRESENTS THE PLACEMENT OF THE NO-PARKING AND SPEED LIMIT SIGNS. ADDITIONAL SIGNING MAY BE REQUIRED DEPENDING ON EACH INDIVIDUAL SITUATION.
2. THE SPACING OF THE NO-PARKING SIGNS SHOULD BE 528' (1/10 MILE) APART, BUT MAY VARY UP TO 50' IF SIGN CAN BE MOUNTED ONTO AN EXISTING POLE OR A STREET LIGHT POLE.
3. NO-PARKING SIGNS SHALL BE R8-3A 24"X24" UNLESS OTHERWISE NOTED.
4. SPEED LIMIT SHALL BE DETERMINED BY THE CITY ENGINEER AND THE SPEED LIMIT SIGN SHALL BE R2-1 24"X30" IN SIZE. THERE SHALL BE 4 SPEED LIMIT SIGNS PER MILE AS SHOWN ABOVE.
5. IF BIKE LANE EXISTS, USE "NO PARKING BIKE LANE" R7-9A SIGN IN PLACE OF R8-3A.
6. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MUTCD.

DETAIL NO.
A1031



CITY OF AVONDALE
STANDARD DETAIL

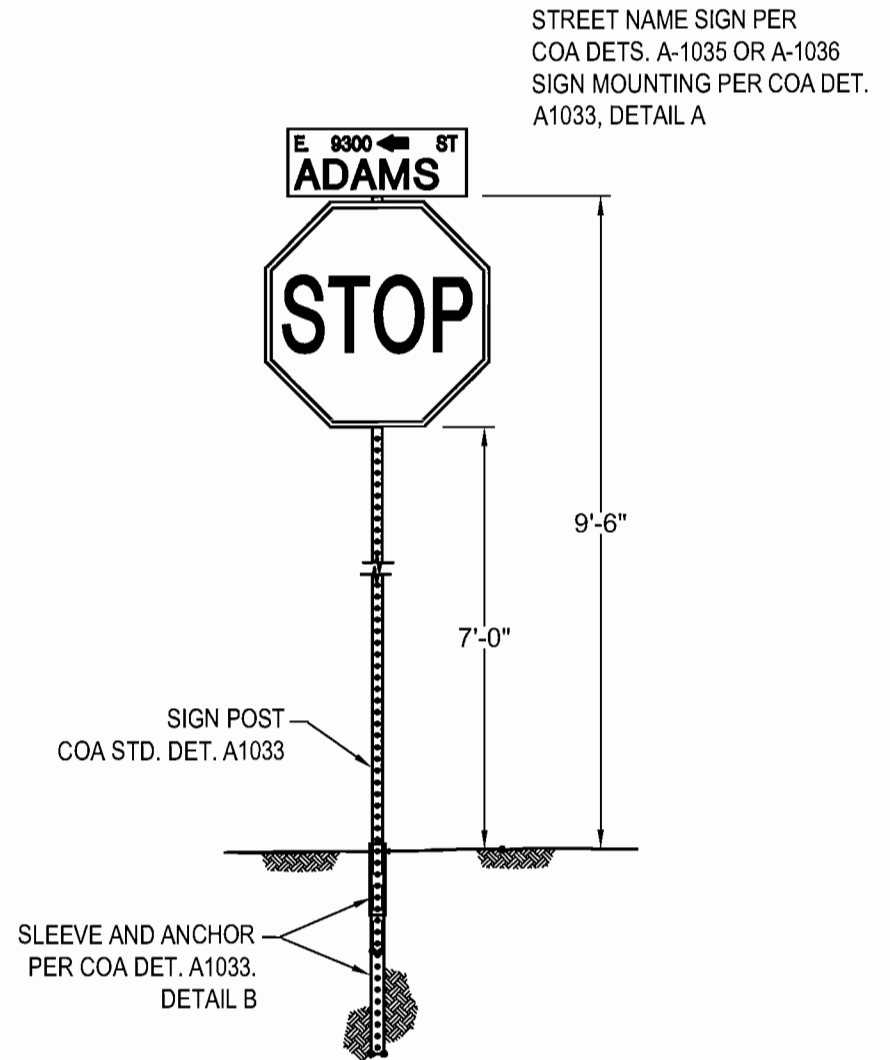
SIGN LOCATIONS ON ARTERIAL STREETS

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08

NOTES:

1. STREET NAME SIGN AND STOP SIGN MOUNTING HEIGHT SHALL BE MEASURED FROM ADJACENT GRADE OF SIDEWALK, TOP OF CURB OR TOP OF NEAREST PAVEMENT.
2. WHEN NO STOP SIGN IS REQUIRED THE STREET NAME SIGN IS MOUNTED AT 9 FEET 6 INCHES.
3. WHEN TWO OR MORE STREET NAME SIGNS ARE MOUNTED ONE ON TOP OF THE OTHER, THE HEIGHT IS MEASURED TO THE BOTTOM SIGN.



DETAIL NO.
A1032

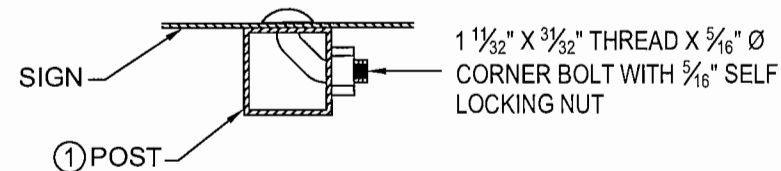
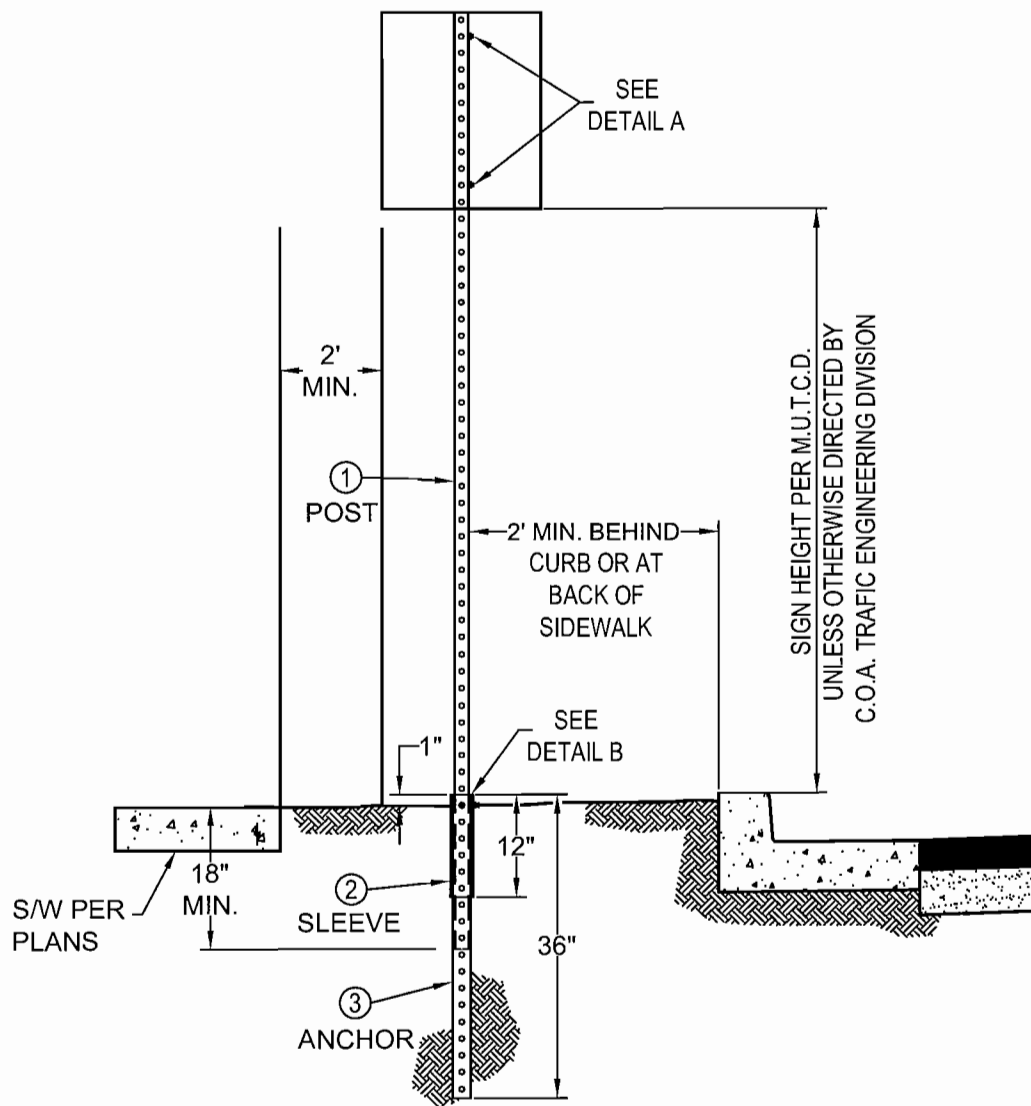


CITY OF AVONDALE
STANDARD DETAIL

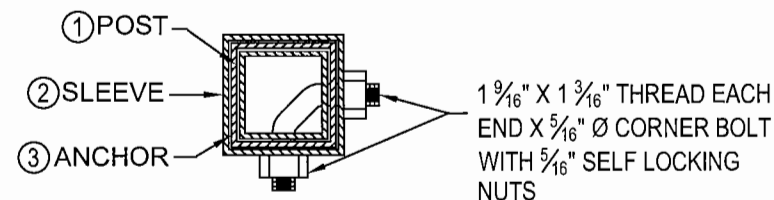
STREET NAME SIGN INSTALLATION

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



DETAIL A
SIGN MOUNTING



DETAIL B
ANCHOR ASSEMBLY

LEGEND

- ① POST - 1 3/4" X 1 3/4" SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING
- ② SLEEVE - 2 1/4" X 2 1/4" X 12", SQUARE PERFORATED 0.105 GALVANIZED STEEL TUBING
- ③ ANCHOR - 2" X 2" X 36", SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING

NOTES:

- 1. SIGN POST, SLEEVE AND ANCHOR PER COA SUPPLEMENTAL SPEC SECTION 1001.4

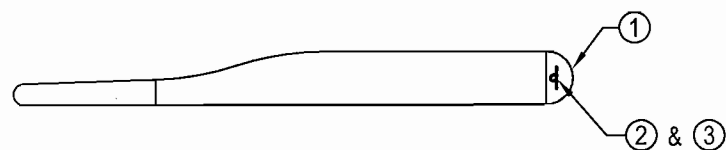
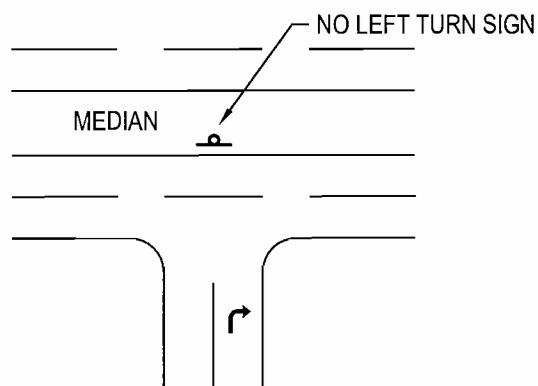
DETAIL NO.
A1033



CITY OF AVONDALE
STANDARD DETAIL

SIGN POST INSTALLATION

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08

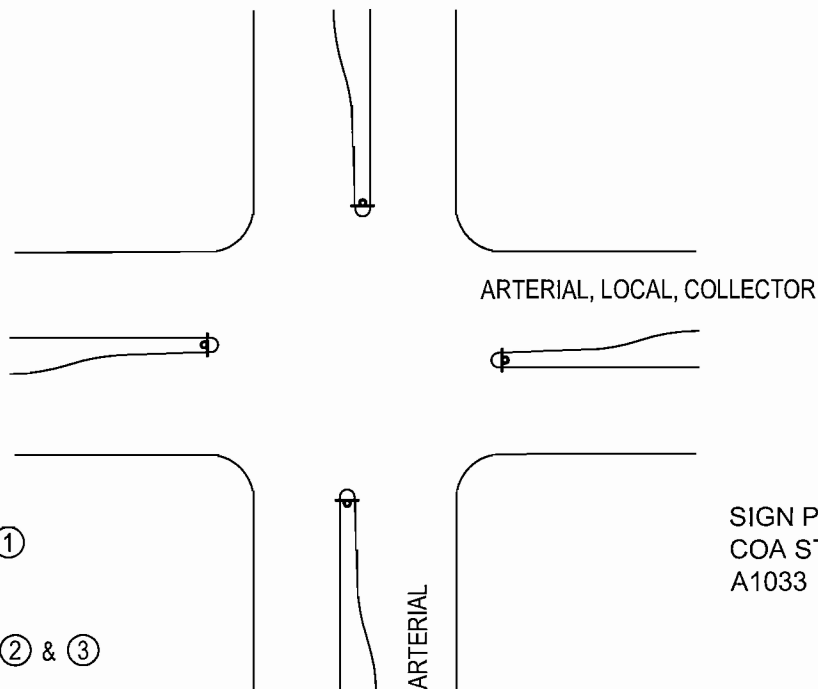


NOTES:

ON THE BACK OF ALL MEDIANS, WHERE TURNING MOTIONS WILL NOT BE MADE ADJACENT TO THE MEDIAN THE FOLLOWING OPTIONS MAY BE IMPLEMENTED.

- ① PAINT BULL NOSE YELLOW WITH REFLECTIVE BEADS AND RPM'S OR
- ② INSTALL OBJECT MARKER OR
- ③ INSTALL R4-7 (NO OM REQUIRED)

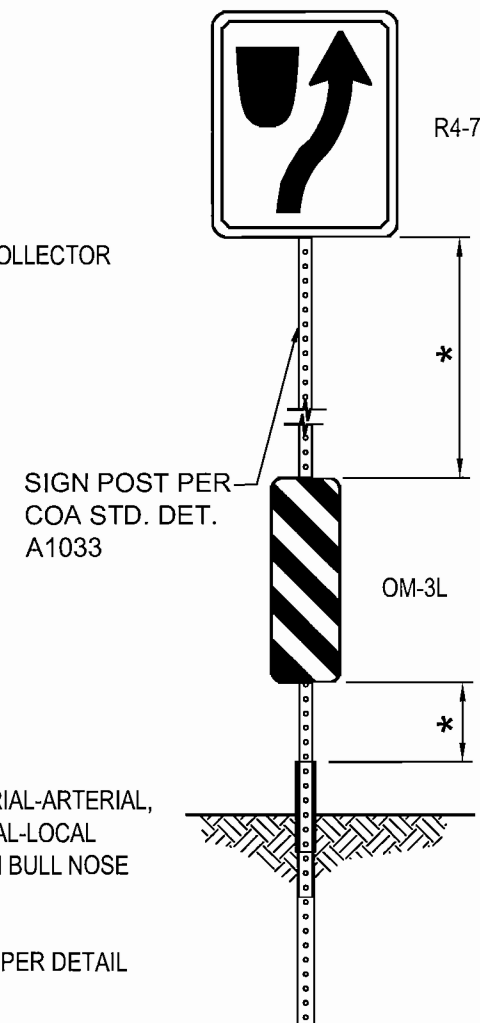
THIS SHOULD ALSO BE USED ON LOCAL / COLLECTOR STREETS WITH MEDIANS INTERNAL TO SUBDIVISIONS.



NOTES:

TO BE INSTALLED AT ALL ARTERIAL-ARTERIAL, ARTERIAL-COLLECTOR, ARTERIAL-LOCAL INTERSECTIONS AT THE MEDIAN BULL NOSE NEAREST THE INTERSECTION.

MEDIANS TO BE CONSTRUCTED PER DETAIL A1220.



SIGN POST PER COA STD. DET. A1033

* INSTALL SIGNS PER MUTCD

DETAIL NO.

A1034



**CITY OF AVONDALE
STANDARD DETAIL**

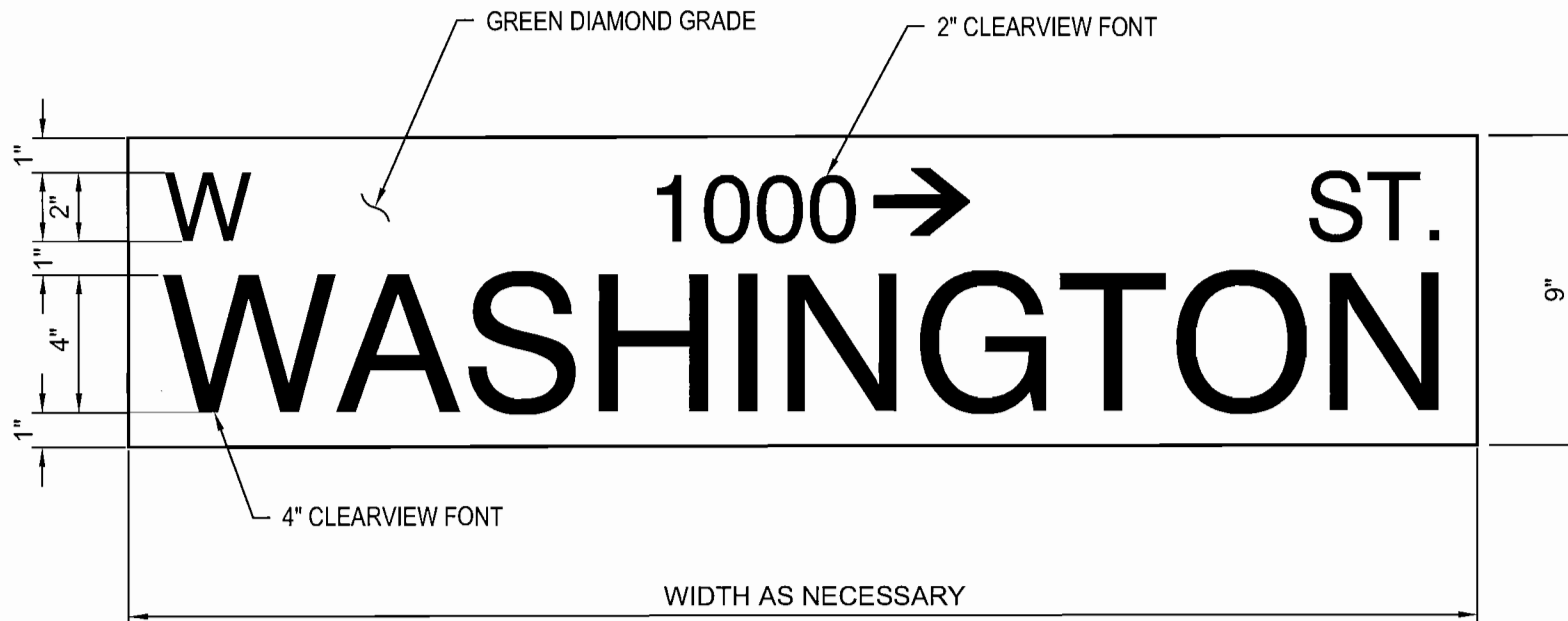
MEDIAN SIGNAGE

APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08



NOTES:

1. STREET NAME SIGNS TO BE INSTALLED AT ALL UNSIGNALIZED INTERSECTIONS.
2. ALL REFLECTIVE SHEETING SHALL BE "HIGH INTENSITY GRADE".
3. STREET NAME SIGNS IN PRIVATE COMMUNITY ARE SUBJECT TO CHANGE AS REQUIRED BY CITY EMERGENCY SERVICES DEPARTMENT.
4. USE CLEARVIEW FONT

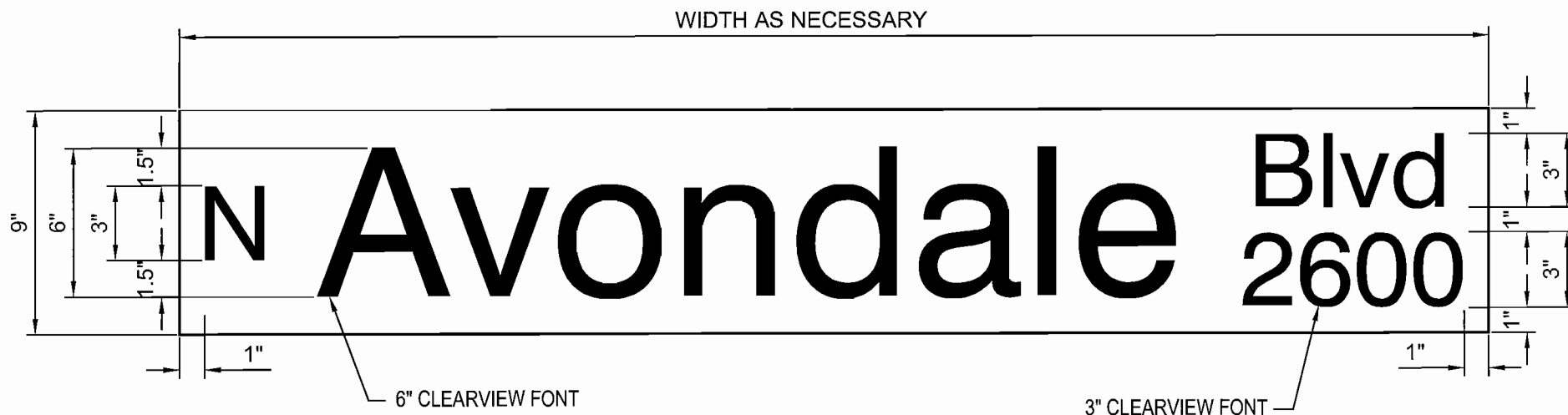
DETAIL NO.
A1035



**CITY OF AVONDALE
STANDARD DETAIL**

**COLLECTOR/LOCAL STREET
NAME SIGN**

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08



NOTES:

1. STREET NAME SIGNS TO BE INSTALLED AT ALL UNSIGNALIZED INTERSECTIONS.
2. ALL REFLECTIVE SHEETING SHALL BE "HIGH INTENSITY GRADE".
3. STREET NAME SIGNS IN PRIVATE COMMUNITY ARE SUBJECT TO CHANGE AS REQUIRED BY CITY EMERGENCY SERVICES DEPARTMENT.
4. USE CLEARVIEW FONT.

DETAIL NO.
A1036



**CITY OF AVONDALE
STANDARD DETAIL**

**ARTERIAL STREET NAME
SIGN**

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08

FIGURE 1

TWO LANE STREET

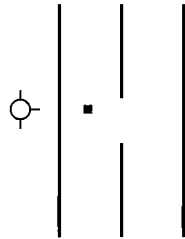


FIGURE 2

MULTI-LANE STREET

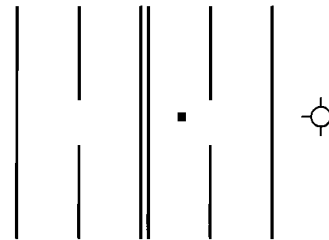


FIGURE 3

TWO LANE STREET
AT INTERSECTION

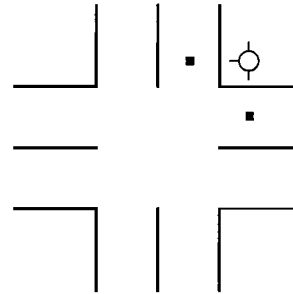


FIGURE 4

FOUR LANE STREET WITH
TURN LANE AT INTERSECTION

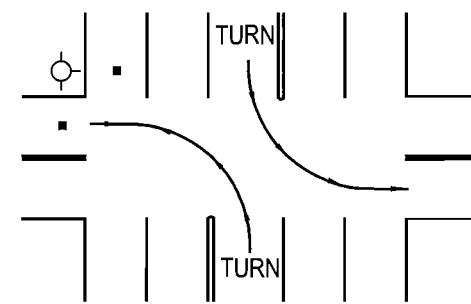


FIGURE 5

FOUR LANE STREET
WITH TURN LANE

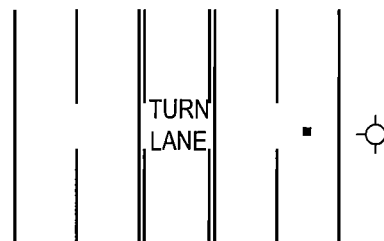


FIGURE 6

SIX LANE STREET
WITH MEDIAN

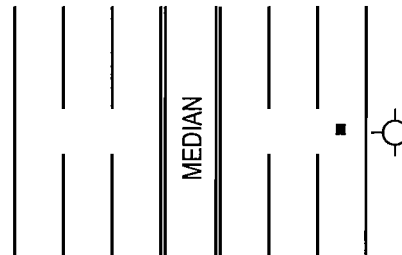
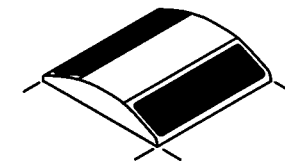


FIGURE 7

(M) PAVEMENT MARKER
(2-WAY REFLECTIVE BLUE)



NOTES:

1. ALL MARKERS TO BE STIMSONITE MODEL 911 AB (BLUE) OR APPROVED EQUAL.
2. MARKERS TO BE LOCATED IN CENTER OF THE INSIDE THRU LANE NEAREST THE FIRE HYDRANT.

DETAIL NO.

A1037



**CITY OF AVONDALE
STANDARD DETAIL**

**PAVEMENT MARKERS FOR
FIRE HYDRANTS**

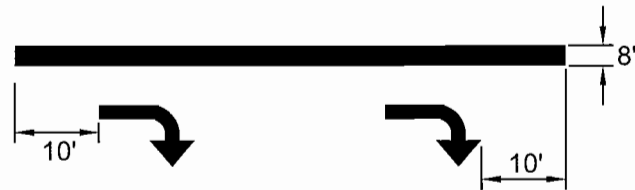
APPROVED BY:

Daniel W. Fitzhugh

DATE:

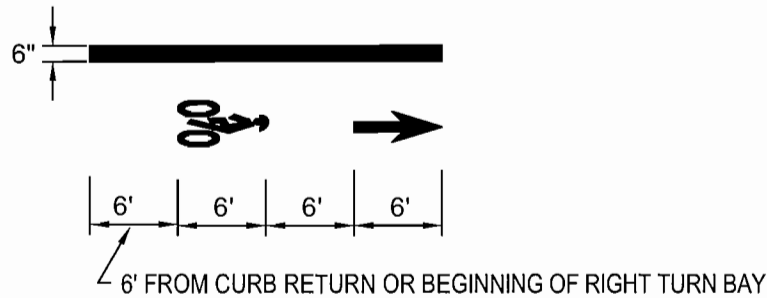
04-07-08

TURN LANE



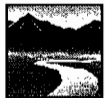
NOTE: IF TURN LANE EXCEEDS 100', ADD SECOND ARROW 10' FROM BACK END OF LANE LINE.

BIKE LANE



NOTE: CONTRACTOR SHALL ONLY INSTALL RPM'S ON ARTERIAL / COLLECTOR STREETS WITH NO STREET LIGHTNING OR AS OTHERWISE REQUIRED BY THE CITY ENGINEER.

DETAIL NO.
A1050



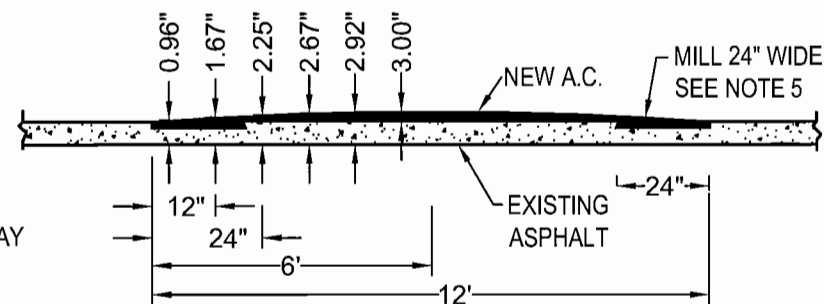
CITY OF AVONDALE
STANDARD DETAIL

PAVEMENT MARKING DETAILS

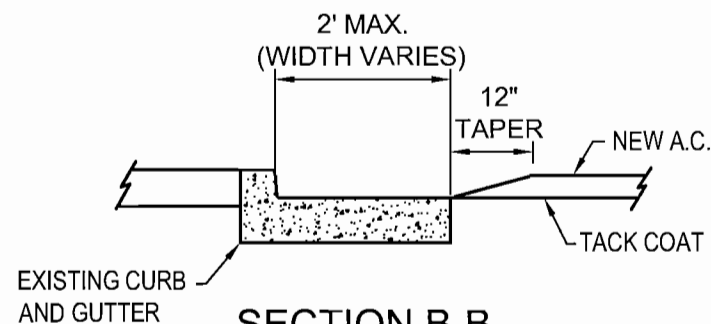
APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



1. CROSS-SECTION SHOWS APPROXIMATE ELEVATIONS FOR 3" SPEED HUMP.
2. SPEED HUMPS SHALL NOT BE PLACED OVER MANHOLES, WATER VALVES, SURVEY MONUMENTS, JUNCTION CHAMBERS, IN CONFLICT WITH DRIVEWAYS, OR ADJACENT TO FIRE HYDRANTS.
3. SPEED HUMPS MUST BE PLACED AT LOCATIONS APPROVED AND SPECIFIED BY THE ENGINEERING DEPARTMENT.
4. SPEED HUMPS SHALL BE CONSTRUCTED WITH AN APPROVED D½ COARSE HOT MIX. PER CITY OF AVONDALE STANDARDS. A TACK COAT SHALL BE APPLIED PRIOR TO APPLICATION OF PAVEMENT.
5. EXISTING ROADWAY SHALL BE MILLED A WIDTH OF 24" AND MINIMUM DEPTH OF 1½" AROUND THE PERIMETER OF SPEED HUMP.
6. CONTRACTOR MUST PROVIDE VERIFICATION OF CROSS-SECTION DIMENSIONS.
7. SPEED TABLES INSTALLED ON MULTI-LANE COLLECTOR ROADWAYS SHALL HAVE MARKINGS INSTALLED FOR EACH CENTER OF TRAVEL LANE WHERE LANE LINES EXIST.



SECTION A-A



SECTION B-B

TO GAIN MAXIMUM EFFECT, SPEED HUMPS MUST BE THE FULL 3". SPEED HUMPS SHALL BE 3" HIGH WITH AN ALLOWABLE MAXIMUM TOLERANCE OF $\pm 0.25"$. CONTRACTORS MUST NOT EXCEED THIS HEIGHT BASED ON CONSIDERATION FOR EMERGENCY AND FIRE DEPARTMENT VEHICLES. BECAUSE OF THIS CONCERN, ANY SPEED HUMPS CONSTRUCTED OVER 3.25" MUST BE CORRECTED AT THE CONTRACTORS EXPENSE.

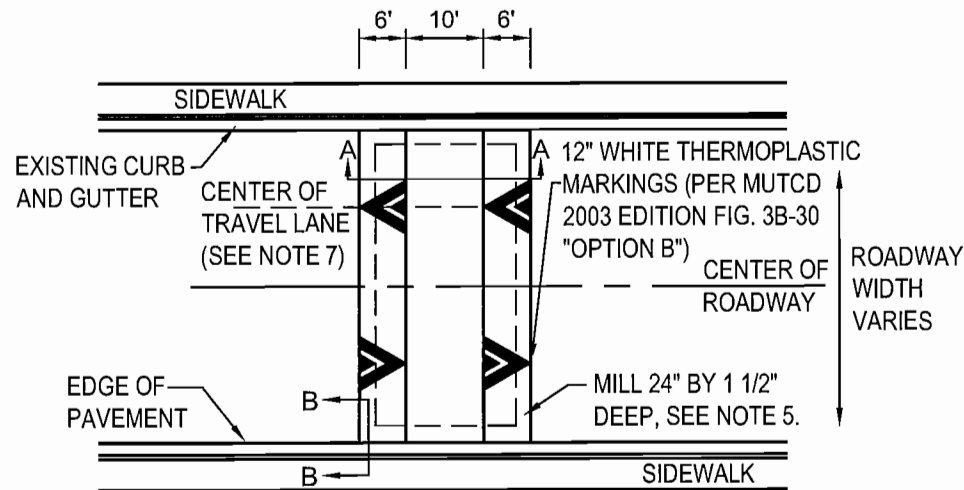
A1060



CITY OF AVONDALE STANDARD DETAIL

SPEED HUMP

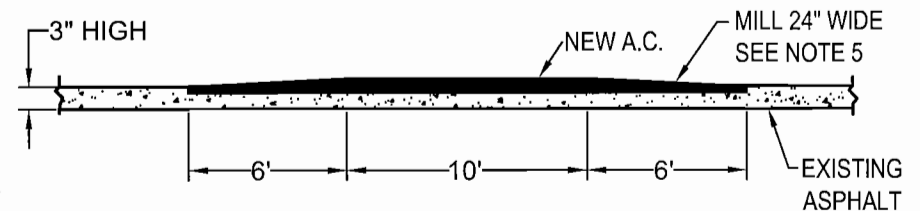
APPROVED BY: Daniel W. Fitzhugh
DATE: 04-07-08



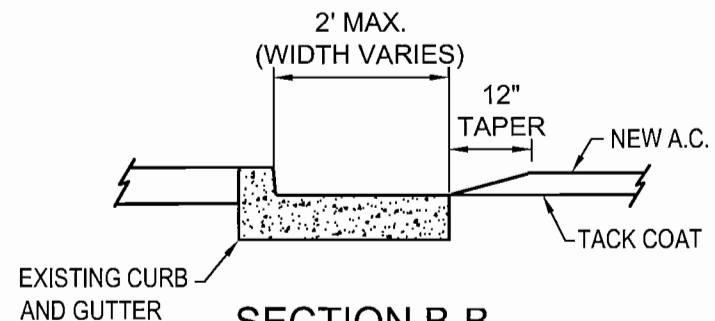
PLAN VIEW

NOTES:

1. CROSS-SECTION SHOWS APPROXIMATE ELEVATIONS FOR 3" SPEED TABLE.
2. SPEED TABLES SHALL NOT BE PLACED OVER MANHOLES, WATER VALVES, SURVEY MONUMENTS, JUNCTION CHAMBERS, IN CONFLICT WITH DRIVEWAYS, OR ADJACENT TO FIRE HYDRANTS.
3. SPEED TABLES MUST BE PLACED AT LOCATIONS APPROVED AND SPECIFIED BY THE ENGINEERING DEPARTMENT.
4. SPEED TABLES SHALL BE CONSTRUCTED WITH AN APPROVED D $\frac{1}{2}$ COARSE HOT MIX. PER CITY OF AVONDALE STANDARDS. A TACK COAT SHALL BE APPLIED PRIOR TO APPLICATION OF PAVEMENT.
5. EXISTING ROADWAY SHALL BE MILLED A WIDTH OF 24" AND MINIMUM DEPTH OF 1 $\frac{1}{2}$ " AROUND THE PERIMETER OF SPEED TABLE.
6. CONTRACTOR MUST PROVIDE VERIFICATION OF CROSS-SECTION DIMENSIONS.
7. SPEED TABLES INSTALLED ON MULTI-LANE COLLECTOR ROADWAYS SHALL HAVE MARKINGS INSTALLED FOR EACH CENTER OF TRAVEL LANE WHERE LANE LINES EXIST.



SECTION A-A



SECTION B-B

IMPORTANT:

TO GAIN MAXIMUM EFFECT, SPEED TABLES MUST BE THE FULL 3". SPEED TABLES SHALL BE 3" HIGH WITH AN ALLOWABLE MAXIMUM TOLERANCE OF ± 0.25 ". CONTRACTORS MUST NOT EXCEED THIS HEIGHT BASED ON CONSIDERATION FOR EMERGENCY AND FIRE DEPARTMENT VEHICLES. BECAUSE OF THIS CONCERN, ANY SPEED TABLES CONSTRUCTED OVER 3.25" MUST BE CORRECTED AT THE CONTRACTORS EXPENSE.

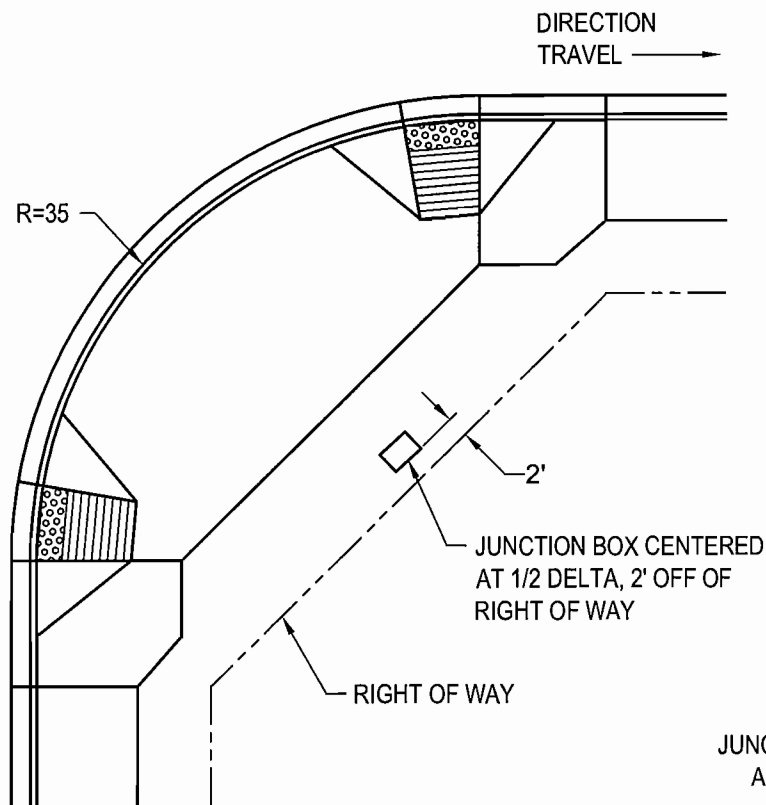
DETAIL NO.
A1061



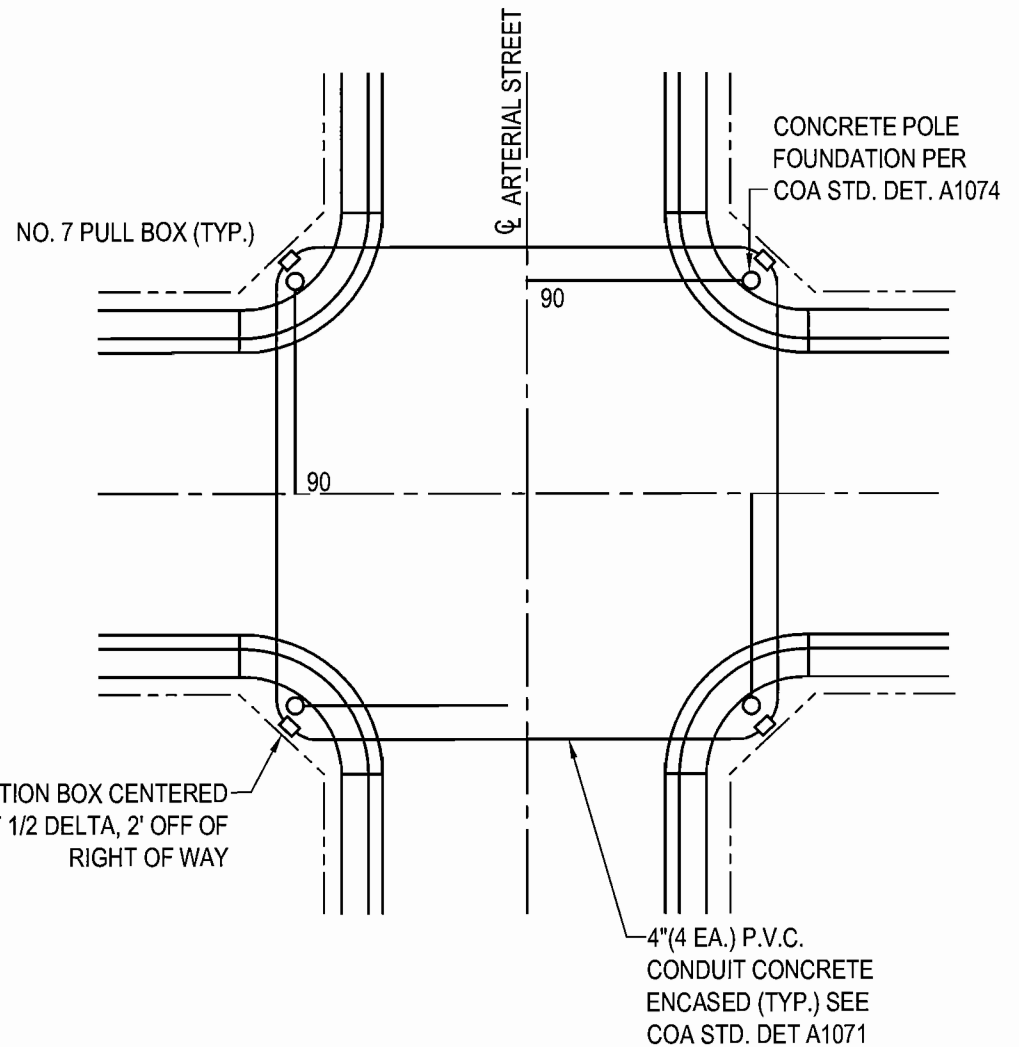
CITY OF AVONDALE
STANDARD DETAIL

SPEED TABLE

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08



PULL BOX LOCATION



DETAIL NO.

A1070



**CITY OF AVONDALE
STANDARD DETAIL**

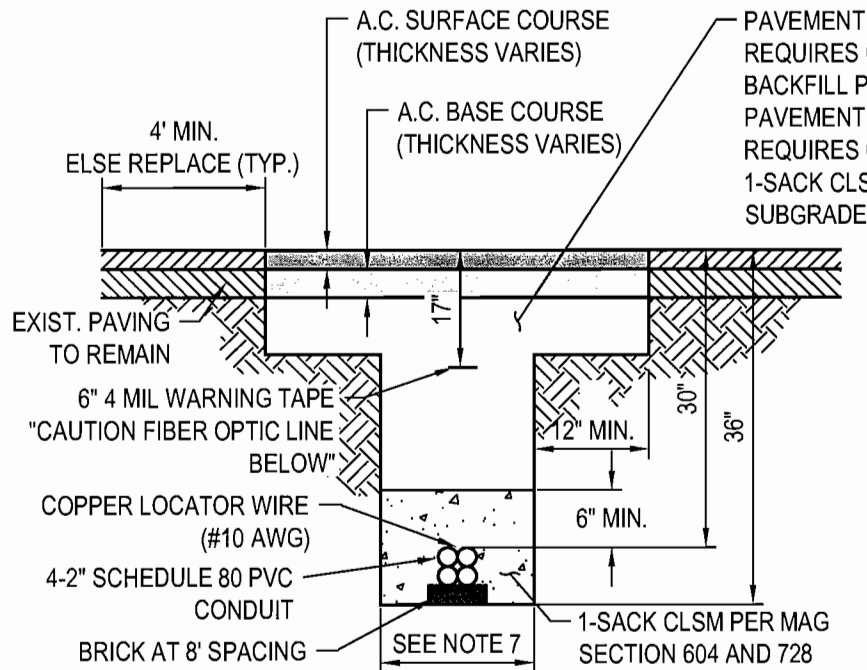
TRAFFIC SIGNAL INTERCONNECT CONDUIT INSTALLATION

APPROVED BY:

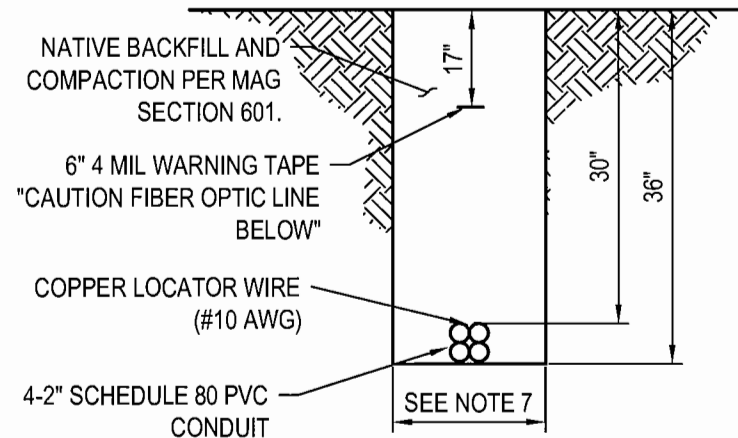
Daniel W. Fitzhugh

DATE:

04-07-08



TRENCH SECTION A
(PAVED)



TRENCH SECTION B
(UNPAVED)

NOTES:

1. TRENCH DEPTH VARIES BASED ON CONFLICTS WITH EXISTING UTILITIES.
2. BID ITEM FOR PROVIDING A TRENCH THAT IS A MINIMUM OF 36" DEEP INCLUDES INSTALLING FIBER OPTIC DUCT AND PROVIDING BACKFILL COMPLETE IN PLACE. THIS ITEM SHALL PROVIDE A MINIMUM COVER DEPTH OF 30" OVER THE CONDUIT DUCT. ALL WARNING TAPE, CONDUIT SPACERS, BRICKS AND COMPACTION WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID OF ITEM, TRENCHING (36") AND INSTALLATION OF FIBER OPTIC DUCT, AND BACKFILL, COMPLETE IN PLACE".
3. BORING SHALL BE ALLOWED WITH PRIOR APPROVAL FROM THE CITY.
4. IF THE CONDUIT ROUTING IS MODIFIED TO CROSS AN EXISTING PORTLAND CEMENT CONCRETE DRIVEWAY THE CONDUITS SHALL BE PLACED BY BORING. ALL ASPHALT DRIVEWAYS MAY BE TRENCHED.
5. ALL CONDUIT BENDS SHALL BE CONCRETE ENCASED FOR A MINIMUM OF TWO (2) FEET BEYOND EACH END OF THE BEND.
6. A 1 SACK OF CEMENT SLURRY BACKFILL SHALL BE USED THROUGH THE PIPE ZONE WHEN BACKFILLING CONDUITS INSTALLED IN A TRENCH IN PAVEMENT. CONDUITS SHALL BE SUPPORTED AND ANCHORED IN THE TRENCH PRIOR TO BACKFILLING WITH THE CEMENT SLURRY.
7. TRENCH WIDTH MAY NOMINALLY VARY FROM 18" TO 22" BUT SHALL NOT EXCEED 24" IN WIDTH.
8. A SINGLE CONTINUOUS INSULATED COPPER LOCATOR WIRE AWG #10 SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF THE CONDUIT RUN.

DETAIL NO.

A1071

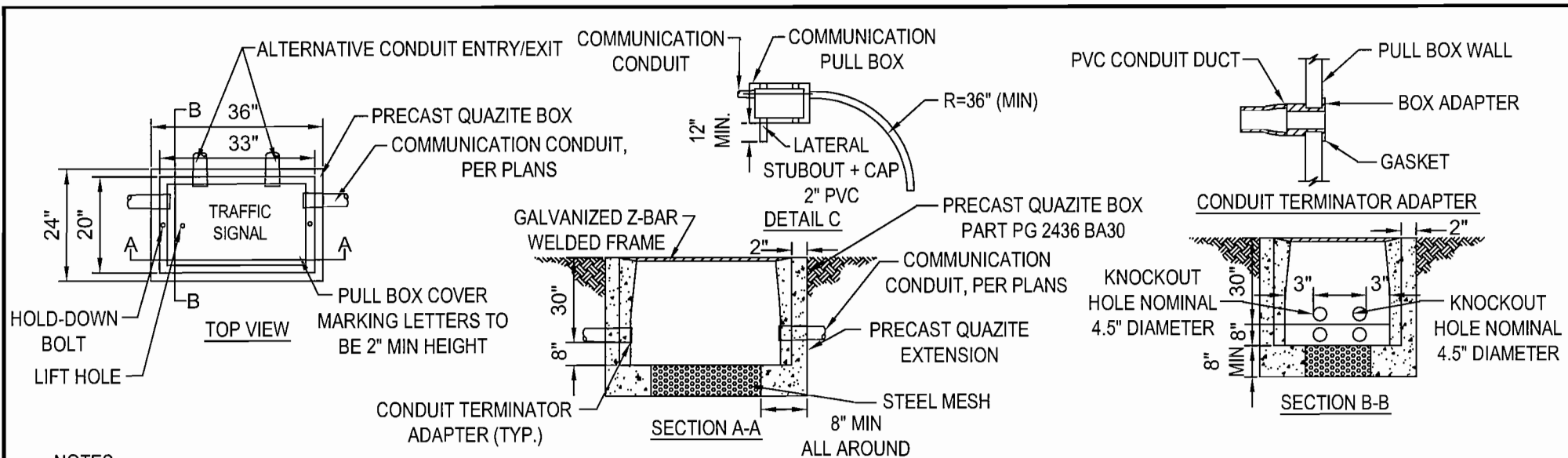


**CITY OF AVONDALE
STANDARD DETAIL**

**TRAFFIC SIGNAL INTERCONNECT
CONDUIT TRENCH DETAIL**

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



NOTES:

- PULLBOX SHALL BE PROVIDED WITH COVER AND SPECIAL CONCRETE FOOTING. COVER SHALL HAVE EMBOSSED NO-SKID PATTERN AND BE LABELED "TRAFFIC SIGNAL". TOPS OF PULLBOXES SHALL BE FLUSH WITH SURROUNDING GRADE OR TOP OR ADJACENT CURB, EXCEPT IN UNPAVED AREAS WHERE PULLBOX IS NOT IMMEDIATELY ADJACENT TO AND PROTECTED BY A CONCRETE FOUNDATION, POLE OR OTHER PROTECTIVE CONSTRUCTION, THE BOX SHALL BE PLACED WITH ITS TOP 0.75 INCH ABOVE SURROUND GRADE. WHERE PRACTICAL, PULLBOXES SHOWN IN THE VICINITY OF CURBS SHALL BE PLACED ADJACENT TO THE BACK OF CURB, AND PULLBOXES SHOWN ADJACENT TO STANDARDS SHALL BE PLACED ON SIDE OF FOUNDATION FACING AWAY FROM TRAFFIC, UNLESS OTHERWISE NOTED. ALL COVERS SHALL BE INTERCHANGEABLE BETWEEN BOXES. TOP OUTSIDE EDGE OF ALL
- CONCRETE COVERS AND PULLBOXES SHALL HAVE A 0.25 INCH MIN. RADIUS. WHEN PULLBOX IS INSTALLED IN SIDEWALK AREA, THE DEPTH OF THE BOX SHALL BE ADJUSTED SO THAT THE TOP OF THE BOX IS FLUSH WITH THE TOP OF THE SIDEWALK. PULLBOX SHALL NOT BE WITHIN THE BOUNDARIES OF NEW OR EXISTING WHEELCHAIR RAMPS.
- ALL BENDS SHALL BE FACTORY BENDS.
- CONTRACTOR SHALL ADAPT CONDUIT STUBOUTS FOR SPECIFIC PROJECT REQUIREMENTS
- FOR SPECIFIC PROJECT REQUIREMENTS. AS A MINIMUM, ONE 2-INCH CONDUIT SHALL BE STUBBED OUT AND CAPPED FOR FUTURE CITY OF AVONDALE USE.
- ADDITIONAL CONDUIT ENTRANCES AS SHOWN ON PLANS.
- THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) IN EITHER CONDUIT DUCT BETWEEN ENTRANCE LOCATIONS (PULLBOXES AND/OR VAULTS).
- PULLBOX SHALL BE FURNISHED WITH FOUR KNOCKOUTS PER SHORT SIDE AND SIX KNOCKOUTS PER LONG SIDE.
- ADDITIONAL CONDUIT ENTRANCES AS SHOWN ON PLANS.
- SEE SPECIAL PROVISIONS REGARDING HOLD DOWN BOLTS FOR TRAFFIC COVERS.
- TERMINATORS FOR COMMUNICATION DUCTS AND LATERAL STUBOUTS MAY BE PROVIDED INSTEAD OF KNOCKOUTS. WHEN KNOCKOUTS ARE USED, SPECIAL CONDUIT TERMINATORS SHALL BE PROVIDED PER THE SPECIAL PROVISIONS.
- ALL DIMENSIONS ARE NOMINAL AND SHALL BE CONSIDERED MINIMUM. VARIATIONS ARE ALLOWABLE.
- ALL CONDUITS SHALL BE SEALED WITH COMPATIBLE SEALANT.
- ALL GROUND CONNECTIONS SHALL BE COATED WITH OXIDATION PROHIBITING COMPOUND.
- ALL CABLE STRAPS SHALL BE DESIGNED TO WITHSTAND ULTRAVIOLET EXPOSURE.
- PULL BOXES SHALL BE SPACED EVERY 250 LINEAR FEET.

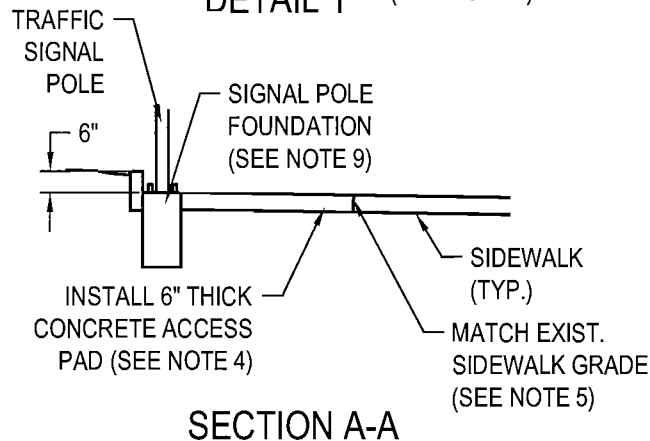
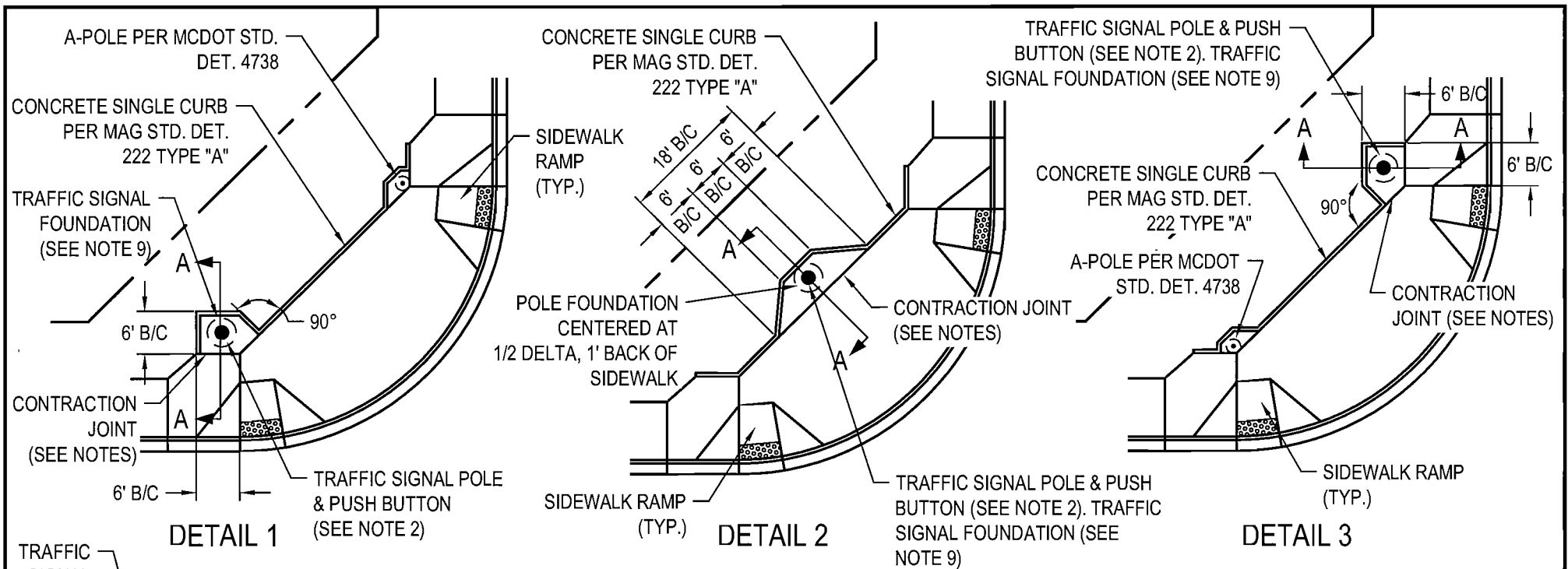
DETAIL NO.
A1072



CITY OF AVONDALE
STANDARD DETAIL

TRAFFIC SIGNAL JUNCTION BOX

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08



NOTES:

1. INSTALL CONCRETE ACCESS PAD IN ACCORDANCE TO THE REQUIREMENTS SPECIFIED IN MAG STD. DET. 230 FOR SIDEWALK CONSTRUCTION.
2. THE CONCRETE ACCESS PAD SHALL PROVIDE A MINIMUM 30"X48" CONCRETE SURFACE ADJACENT TO THE ADA PUSH BUTTON AS SHOWN.
3. ALL CONCRETE SHALL BE CLASS B PER MAG STD. SPECIFICATION SECTION 725.
4. SLOPE CONCRETE ACCESS PADS 1.5% TOWARDS SIDEWALK FOR DRAINAGE PURPOSES.
5. INSTALL CONTRACTION JOINT BETWEEN CONCRETE ACCESS PAD AND SIDEWALK RAMP. IF SIDEWALK IS EXISTING, INSTALL EXPANSION JOINT IN LIEU OF CONTRACTION JOINT.
6. GRADE SOILS AT 6:1 MAX. SLOPE AT PERIMETER OF CONCRETE ACCESS PAD TO MATCH EXISTING, UNLESS OTHERWISE NOTED.
7. THE TYPICAL DETAILS SHOWN ON THIS SHEET MAY REQUIRE MODIFICATIONS TO ACCOMMODATE EXISTING FIELD CONDITIONS AS DIRECTED BY THE CITY INSPECTOR.
8. NEW CONCRETE ACCESS PAD SHALL NOT COVER OR INTERFERE WITH TRAFFIC SIGNAL OR PEDESTRIAN POLE MOUNTINGS.
9. TOP OF SIGNAL POLE FOUNDATION SHALL MATCH CONCRETE ACCESS PAD (SEE SECTION A-A).

DETAIL NO.
A1073



CITY OF AVONDALE
STANDARD DETAIL

SIGNAL POLE LOCATIONS

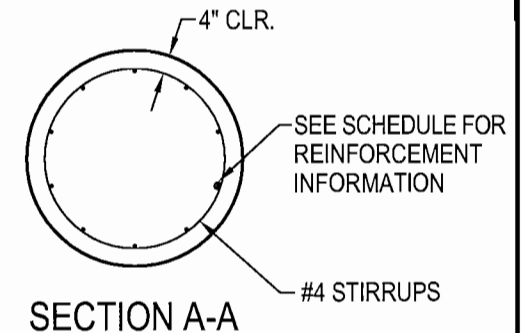
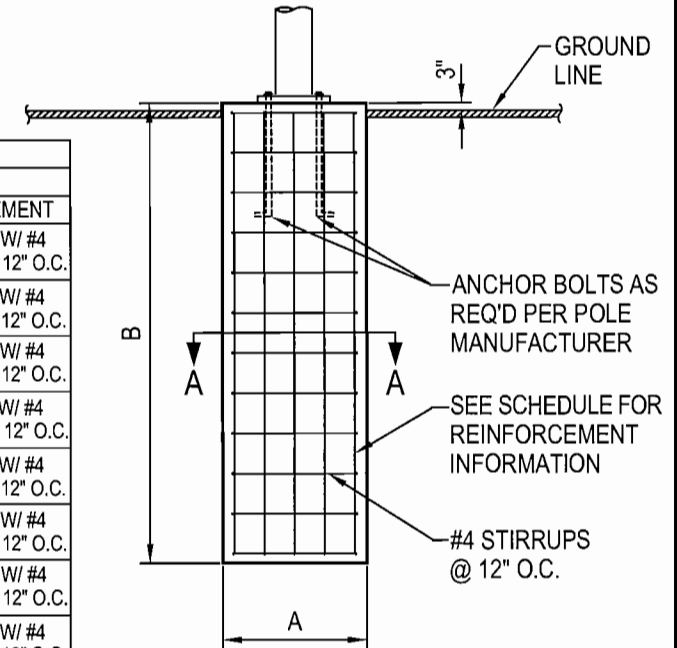
APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08

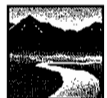
ALLOWABLE PASSIVE SOIL PRESSURE	100 PSF / FT			150 PSF / FT			200 PSF / FT		
MAXIMUM PASSIVE SOIL PRESSURE	1,000 PSF			1,500 PSF			2,000 PSF		
FOOTING DIMENSIONS	A	B	REINFORCEMENT	A	B	REINFORCEMENT	A	B	REINFORCEMENT
35' MAST ARM	3'-0"	20'-0"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-0"	15'-6"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-0"	13'-0"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.
			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.
			18 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			18 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			18 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.
40' MAST ARM	3'-0"	21'-3"	9 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-0"	16'-6"	9 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-0"	13'-9"	9 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.
			12 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			12 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			12 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.
			16 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			16 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			16 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.
45' MAST ARM	3'-6"	20'-4"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-6"	15'-9"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	3'-6"	13'-3"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.
			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.
			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.
55' MAST ARM	4'-0"	19'-9"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	4'-0"	15'-3"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.	4'-0"	12'-9"	10 - #8 BAR W/ #4 STIRRUPS AT 12" O.C.
			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.			13 - #7 BAR W/ #4 STIRRUPS AT 12" O.C.
			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.			17 - #6 BAR W/ #4 STIRRUPS AT 12" O.C.

NOTE:

1. THE FOOTING DESIGN DOES NOT APPLY TO TRAFFIC SIGNALS LOCATED NEAR THE TOP OF ESCARPMENTS OR RIDGES OR IN THE UPPER HALF OF HILLS WITH ABRUPT GRADE CHANGES EXCEEDING 15 VERTICAL FEET.
2. FOOTING SIZES & REINFORCEMENT SHALL BE CONSTRUCTED USING THE "100 PSF/FT" VALUES (OUTLINED IN BOLD) UNLESS A GEOTECHNICAL EXPLORATION & RECOMMENDATION ALLOWS FOR HIGHER SOIL CAPACITIES.
3. THE FOUNDATION DESIGN IS ADEQUATE TO SUPPORT SIGNAL POLES MANUFACTURED BY VALMONT INDUSTRIES, OR AN APPROVED EQUAL PROVIDED THE MAXIMUM LOADING SHOWN ON THIS DETAIL IS NOT EXCEEDED. IF THE LOADS ARE EXCEEDED, THE CONTRACTOR SHALL HAVE THE FOUNDATION ANALYZED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ARIZONA.



DETAIL NO.
A1074

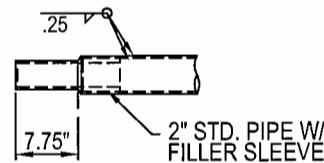
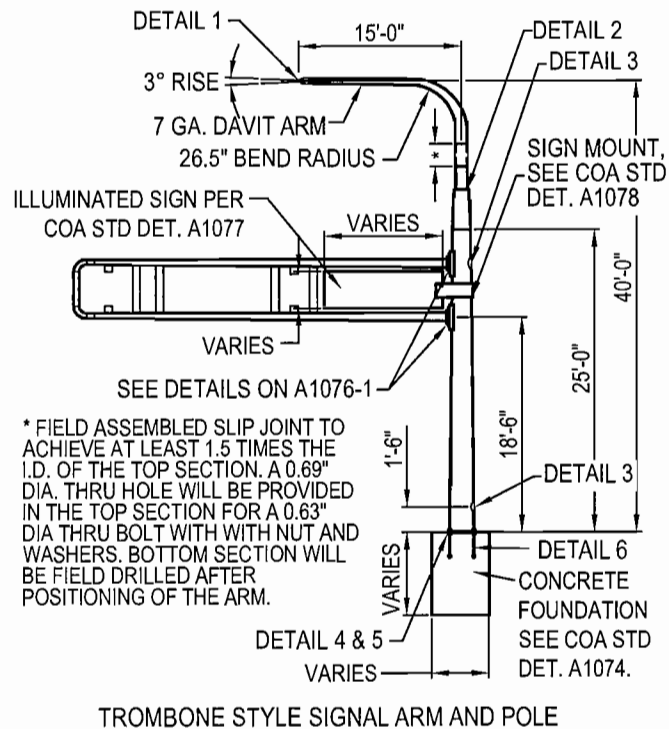


CITY OF AVONDALE
STANDARD DETAIL

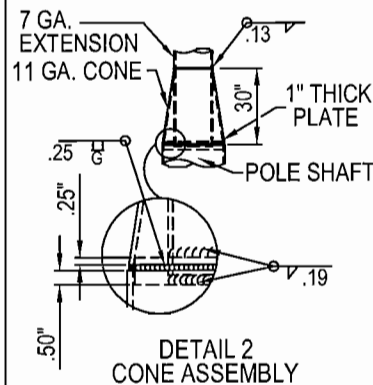
TROMBONE STYLE TRAFFIC
SIGNAL POLE FOUNDATION

APPROVED BY:

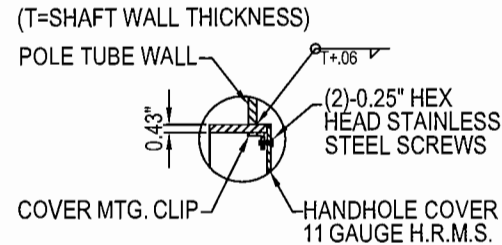
Daniel W. Fitzhugh
DATE: 04-07-08



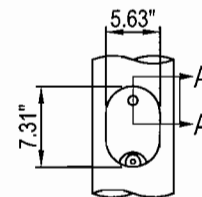
DETAIL 1
LUMINAIRE ARM END TENON



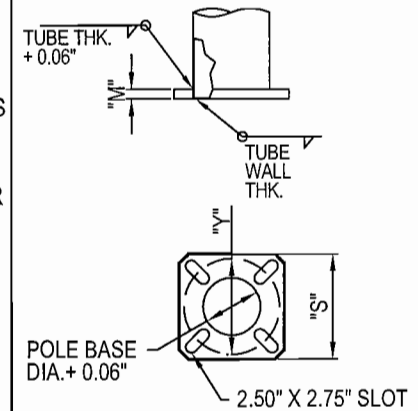
DETAIL 2
CONE ASSEMBLY



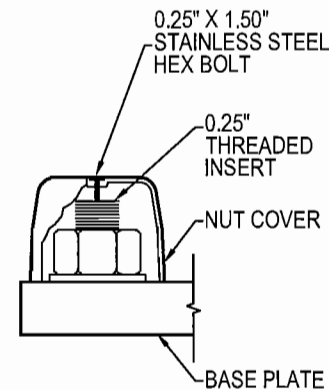
SECTION A-A



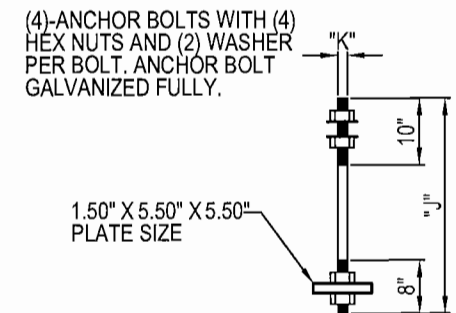
DETAIL 3 HANDHOLE



DETAIL 4
POLE BASE



DETAIL 5
NUT COVERS



DETAIL 6
ANCHOR BOLT

NOTES:

1. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES, (I.E. BOLT CIRCLE WITH POLE MANUFACTURER).
2. VERIFY IN FIELD ALL EXISTING CONDITIONS SHOWN ON DRAWINGS.
3. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE STAMP (AND SIGNATURE) OF AN ENGINEER REGISTERED IN ARIZONA.
4. THE POLE MANUFACTURER SHALL BE RESPONSIBLE FOR SPECIFYING ALL ANCHOR BOLT INFORMATION (I.E. DIAMETER, EMBEDMENT LENGTH, BOLT CIRCLE, MATERIAL ETC.) ENSURING THE ANCHOR BOLTS ARE CAPABLE OF TRANSFERRING ALL APPLICABLE LOADS INTO THE FOUNDATION WITHOUT EXCEEDING THE MAXIMUM LOAD REQUIREMENTS SPECIFIED ON THIS DETAIL.
5. REFER TO CITY OF AVONDALE SUPPLEMENT TO MAG SPECIFICATIONS AND DETAILS PART 900 TRAFFIC SIGNALS FOR SPECIFIC DESIGN DATA, FOUNDATION WORK, FOUNDATION CONCRETE AND SPECIAL INSPECTIONS.
6. SEE COA STANDARD DETAIL A1075-1 FOR POLE AND MAST ARM SCHEDULE.

DETAIL NO.
A1075



CITY OF AVONDALE
STANDARD DETAIL

TROMBONE STYLE SIGNAL POLE DETAILS

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08

TABLE 1: POLE AND MAST ARM SCHEDULE

			POLE DATA				BASE PLATE DATA				ANCHOR BOLT DATA			MAST ARM DATA			
POLE TYPE	QTY.	SIGNAL ARM SPAN (FT)	BASE DIA.	TOP DIA.	LENGTH	(THK.)	SQUARE "S"	THK. "M"	BOLT CIRCLE RANGE		DIAMETER "K"	LENGTH "J"	BOLT CIRCLE "Y"	FIXED END DIA.	FREE END DIA.	GAUGE	LENGTH (FT)
									BC1	BC2							
Q	1	35	13.00"	9.50"	25'-0"	0.25"	25.00"	2.00"	23.50"	24.50"	2.25"	70"	24.00"	9.18"	4.00"	3	37
Q	1	40	15.50"	12.00"	25'-0"	0.44"	25.00"	2.00"	23.50"	24.50"	2.25"	70"	24.00"	12.44"	6.54"	3	42
R	1	45	15.50"	12.00"	25'-0"	0.44"	25.00"	2.00"	23.50"	24.50"	2.25"	70"	24.00"	13.00"	6.42"	3	47
R	1	50	17.00"	13.50"	25'-0"	0.44"	25.00"	2.00"	23.50"	24.50"	2.25"	70"	24.00"	13.84"	6.54"	*	52
R	4	55	17.00"	13.50"	25'-0"	0.44"	25.00"	2.00"	23.50"	24.50"	2.25"	70"	24.00"	14.54"	6.54"	*	57

* SEE DETAIL 4 ON COA STD. DET. A1075

DETAIL NO.

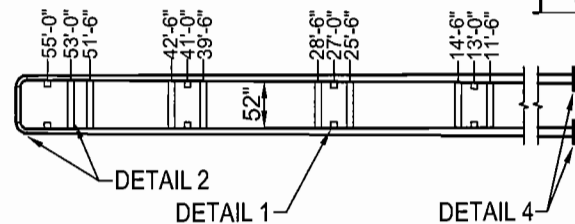
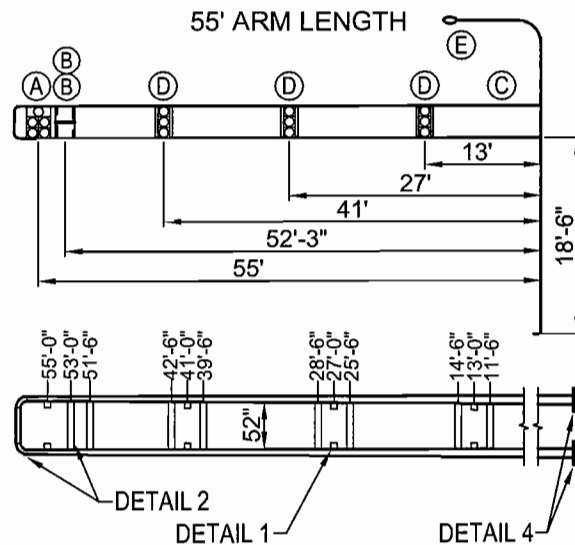
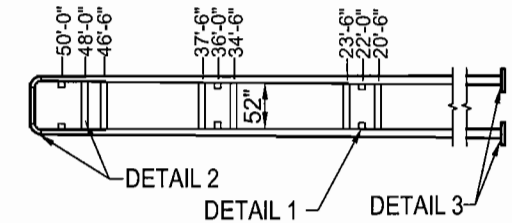
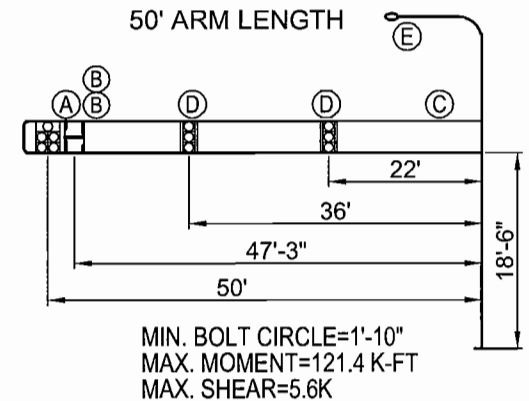
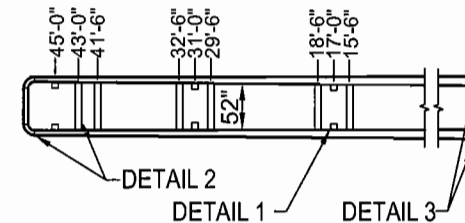
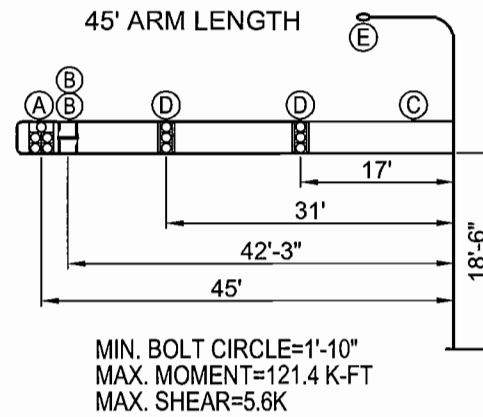
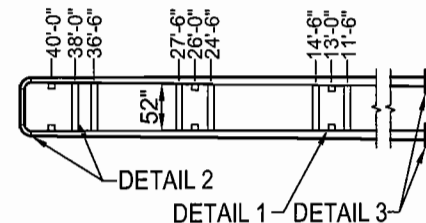
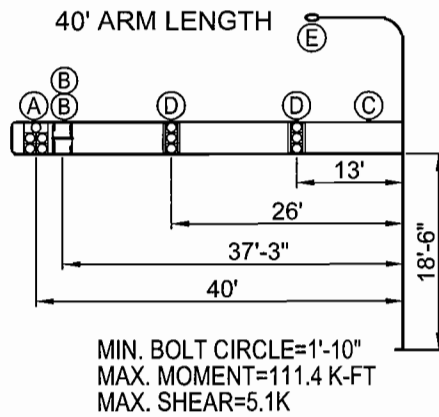
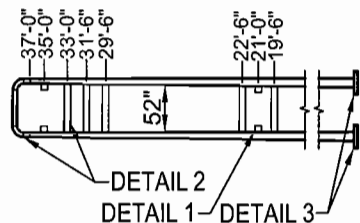
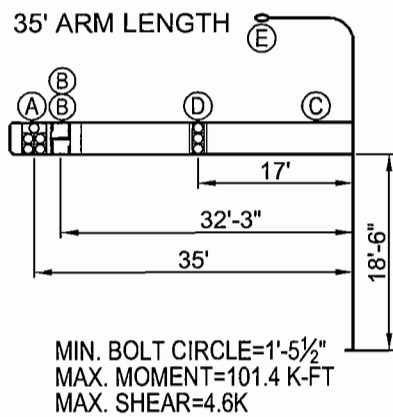
A1075-1CITY OF AVONDALE
STANDARD DETAIL

POLE AND MAST ARM SCHEDULE

APPROVED BY:

DATE:

04-07-08



NOTE:
ALL ARM ATTACHMENTS DIMENSIONED FROM
POLE SIMPLEX PLATE

DESIGN CRITERIA:
1994 AASHTO STANDARD
SPECIFICATIONS FOR STRUCTURAL
SUPPORTS FOR HIGHWAY SIGNS,
LUMINAIRES, AND TRAFFIC SIGNALS

WIND VELOCITY:
80 MPH ISOTACH

MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
TUBE - 0.25", 0.44" WALL	A572 GR.65	65
TUBE - 3 GA. & 7 GA.	A595 GR.A	55
PIPE	-	36
BASE PLATE & SIGNAL ARM ATTACHMENT	A36	36
ANCHOR BOLTS	F 1554	55
SIGNAL ARM CONNECTING BOLTS	A325	-
FINISH COAT: TGIC OR URATHANE POLYESTER POWDER		
COLOR: COCOA BROWN VALMONT SPEC: F-264D		

LOADING CHART

DEVICE	DESCRIPTION	PROJ. AREA (FT²)	WEIGHT (LBS)
(A)	12"-5 SEC. SIGNAL W/ BACKPLATE	13.72	100
(B)	24" X 24" SIGN	4.00	15
(C)	48" X 120" SIGN	40.00	400
(D)	12"-3 SEC. SIGNAL W/ BACKPLATE	8.67	60
(E)	LUMINAIRE	3.30	55

DETAIL NO.

A1076

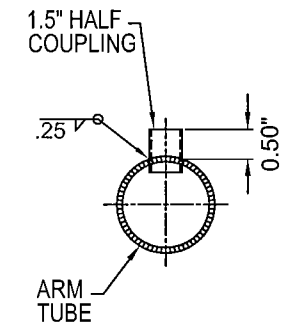


CITY OF AVONDALE
STANDARD DETAIL

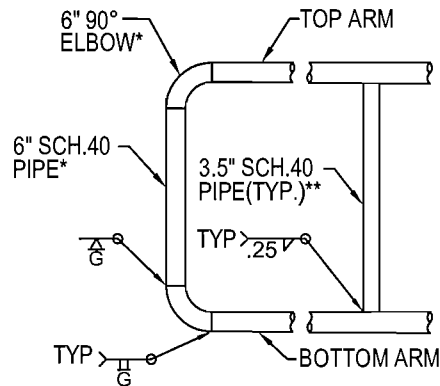
TROMBONE STYLE
SIGNAL MAST ARM

APPROVED BY:

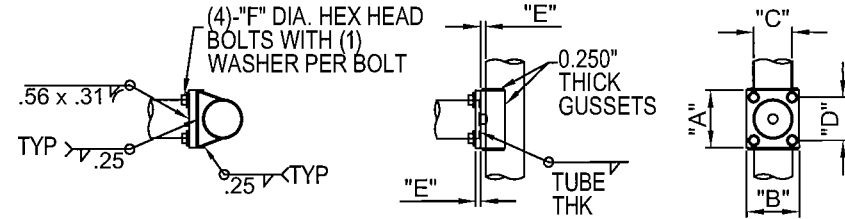
Daniel W. Fitzgibbon
DATE: 04-07-08



DETAIL 1
SIGNAL ARM COUPLING

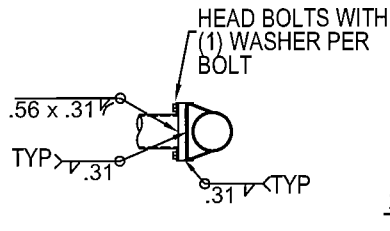


* USE 3.5" FOR 35' ARM
** USE 3" FOR 35' ARM
DETAIL 2
CONNECTING ELBOW & TYP. STRUT

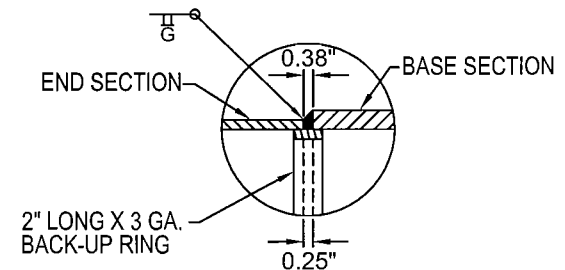
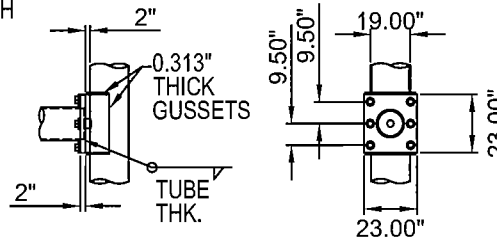


SIGNAL ARM ATTACHMENT DATA						
MAST ARM LENGTH	"A"	"B"	"C"	"D"	"E"	"F"
35'-0"	16.25"	15.00"	11.00"	12.25"	1.50"	1.50" x 3.25"
40'-0"	17.25"	16.00"	12.00"	13.25"	1.75"	1.50" x 3.75"
45'-0"	17.25"	16.00"	12.00"	13.25"	1.75"	1.50" x 3.75"

DETAIL 3
SIGNAL ARM ATTACHMENT



DETAIL 4
SIGNAL ARM ATTACHMENT (50' AND 55' ARM LENGTH)



ARM SECTION DATA				
ARM	BASE SECTION		END SECTION	
	LENGTH	THK.	LENGTH	GAUGE
45'-0"	5'-11"	0.250"	46'-1"	3
55'-0"	10'-11"	0.250"	46'-1"	3

WELDED SIGNAL ARM SPLICE

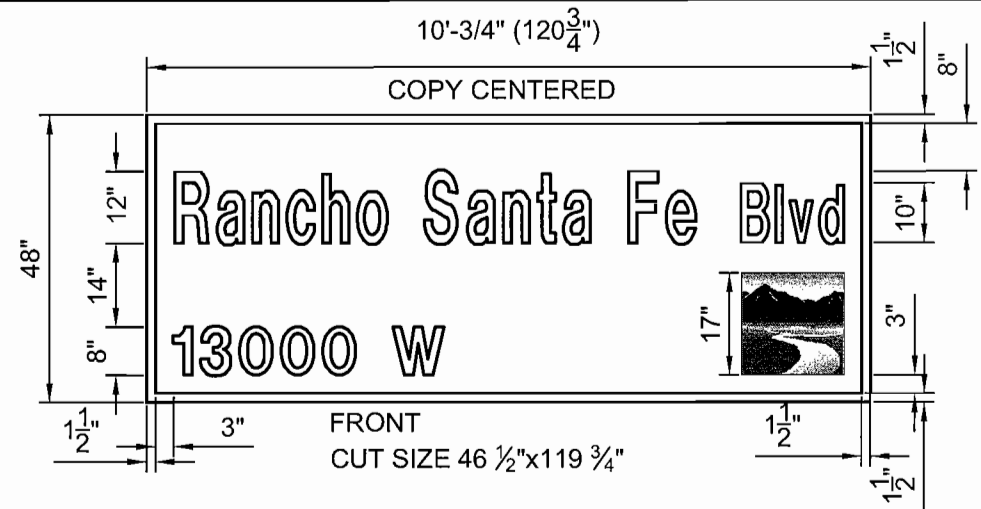
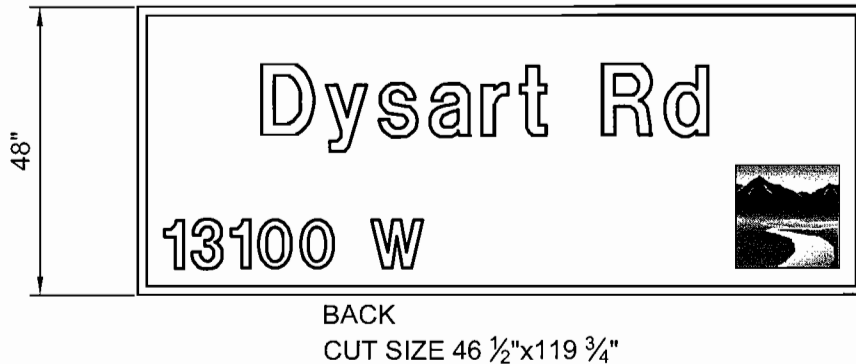
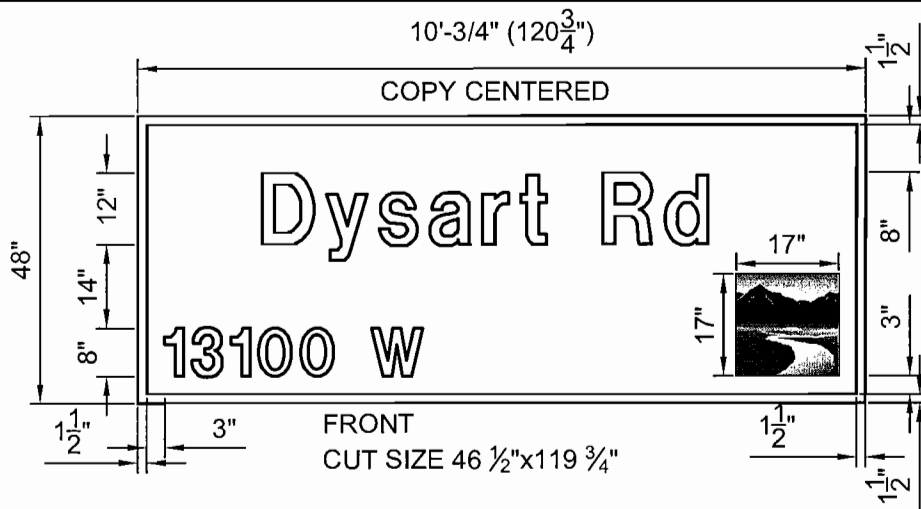
DETAIL NO.
A1076-1



CITY OF AVONDALE
STANDARD DETAIL

TROMBONE STYLE SIGNAL POLE DETAILS

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08



DOUBLE FACE INTERNALLY ILLUMINATED STREET SIGN

CABINET:

EXTRUDED MMG12 ALUMINUM 12" DEEP WITH 1 1/2" RETAINERS,
HINGED FACE WITH PROP ROD.

FINISH:

PRIMED AND PAINTED TO MATCH CHOCOLATE BROWN POLES AND MAST ARM.

ILLUMINATION:

LAMPS: (4) F120-T CW/HO AT 11" CENTERS.
BALLAST: EESB 1040-14L (120V).

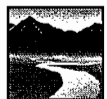
FACES:

3/16" WHITE POLYCARBONATE WITH FIRST SURFACE VINYL.
BACKGROUND: 3M #3990 WHITE DIAMOND GRADE REFLECTIVE WITH 3M
#1177 GREEN EC OVERLAY. (REVERSED OUT WHITE GRAPHICS)
FACES TO RECEIVE 3M #1160-A - GRAFFITI RESIST FILM.
LOGO: DIGITAL PRINT.

INSTALLATION:

ACCORDING TO EXISTING POLE TYPE.

DETAIL NO.
A1077



CITY OF AVONDALE
STANDARD DETAIL

ILLUMINATED STREET NAME
SIGNS

APPROVED BY:

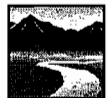
Daniel W. Fitzhugh
DATE: 04-07-08

MATERIALS				
ITEM	QTY	DESCRIPTION	MATERIAL	PART #
1	1	BASE PLATE	C10X15.5 CHANNEL, 2.6" FLANGE, STEEL	
2	20	ANGLE CUP	2 X 2 X 3/8" X 1.5" LONG, ANGLE, STEEL	
3a	1	TOP OUTSIDE CLAMP PLATE	17" X 8.5" X 3/8" THICK, STEEL PLATE	
3b	1	TOP INSIDE CLAMP PLATE	17" X 12" X 3/8" THICK, STEEL PLATE	
3c	4	LARGE GUSSET	5" X 2.5" X 3/8" THICK, STEEL PLATE	
3d	2	END PLATE	13" X 12" X 3/8" THICK, STEEL PLATE	
3e	2	SMALL GUSSET	2.5" X 2.5" X 3/8" THICK, STEEL PLATE	
3f	1	BOTTOM OUTSIDE CLAMP PLATE	17" X 8.5" X 3/8" THICK, STEEL PLATE	
3g	1	BOTTOM INSIDE CLAMP PLATE	17" X 12" X 3/8" THICK, STEEL PLATE	

NOTES:

1. SIGNS TO BE 6 FT. HORIZONTAL AND 12 FT. VERTICAL FROM HIGH VOLTAGE WIRES.
2. SIGNS TO BE U.L. LABELED AND COMPLY WITH ART. 600, NEC.
3. SIGNS TO BE ON SEPARATE CIRCUIT WITH UNDERGROUND FEEDER.
4. PROVIDE PEDESTRIAN PROTECTION DURING SIGN ERECTION PER SEC. 3306, IBC
5. STRUCTURAL ALUMINUM 6061-T6, F_b=19000. PSI.
6. RED HEAD THRU BOLT WEDGE ANCHORS OR APPROVED EQUAL PER ICBO # ER-1372, INSTALL PER MANUF. SPECIFICATION.
7. HILTI HY 150 EPOXY ADHESIVE OR APPROVED EQUAL PER ICBO 5193 INSTALL PER MANUF. SPEC.
8. HILTI KWIK BOLT-II OR APPROVED EQUAL PER ICBO 4627 INSTALL PER MANUF. SPEC.
9. PREDRILL ALL HOLES 1/8" Ø SMALLER THAN DIAMETER OF LAG SCREWS AND COVER WITH MASTIC
10. DESIGN WIND LOAD 90 MPH EXP. "C".

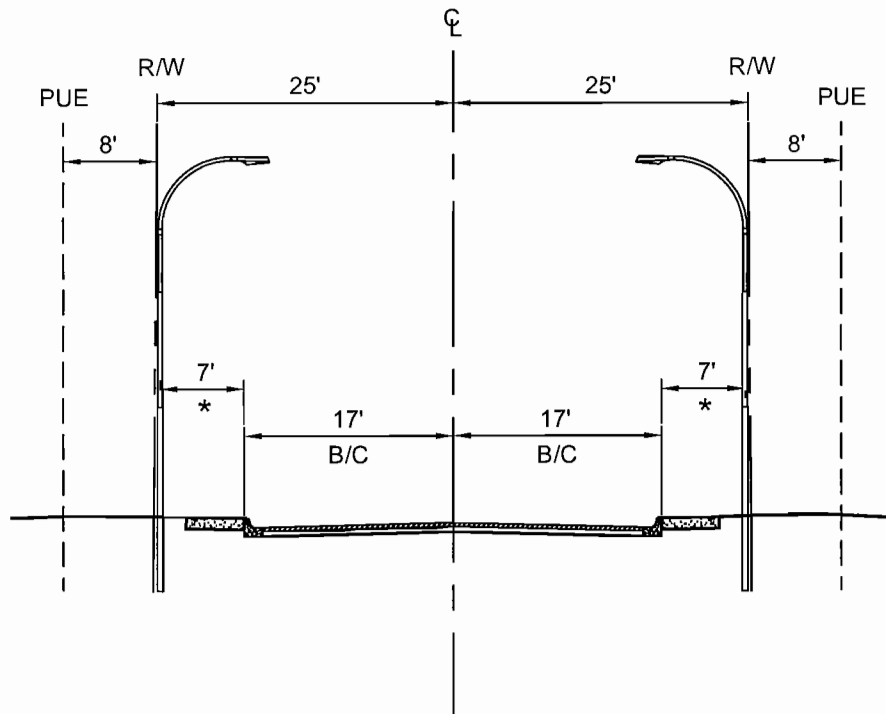
DETAIL NO.
A1078-1



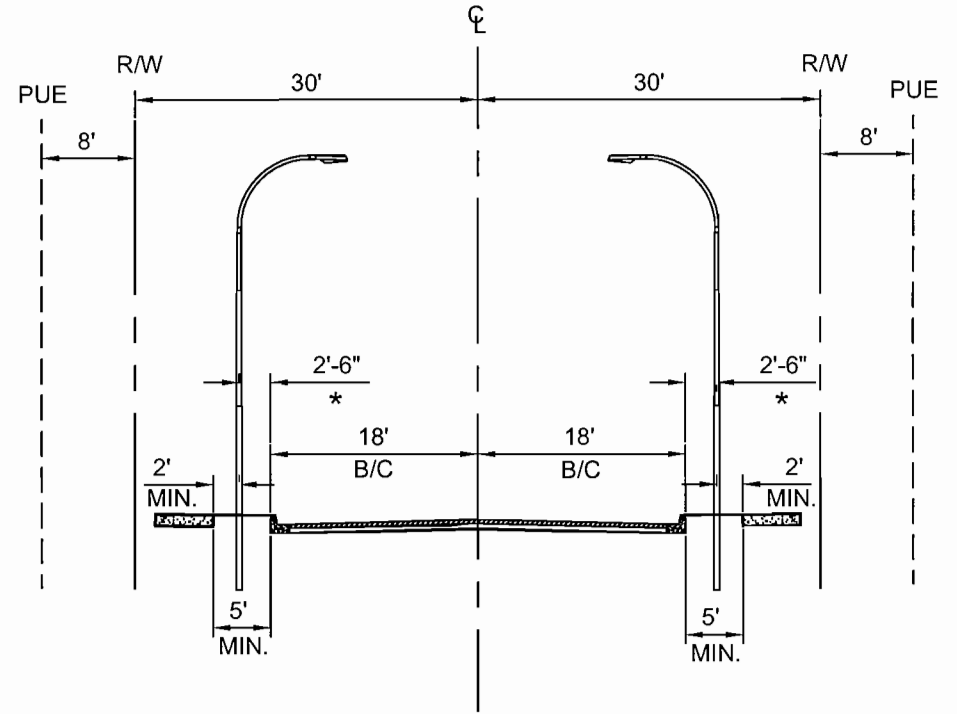
**CITY OF AVONDALE
STANDARD DETAIL**

ILLUMINATED SIGN POLE MOUNTING DETAIL

APPROVED BY:
Daniel W. Fitzgough
DATE: 04-07-08



A1000 LOCAL STREET SECTION



A1001 LOCAL STREETSCAPE SECTION

* DIMENSION TO CENTER OF POLE

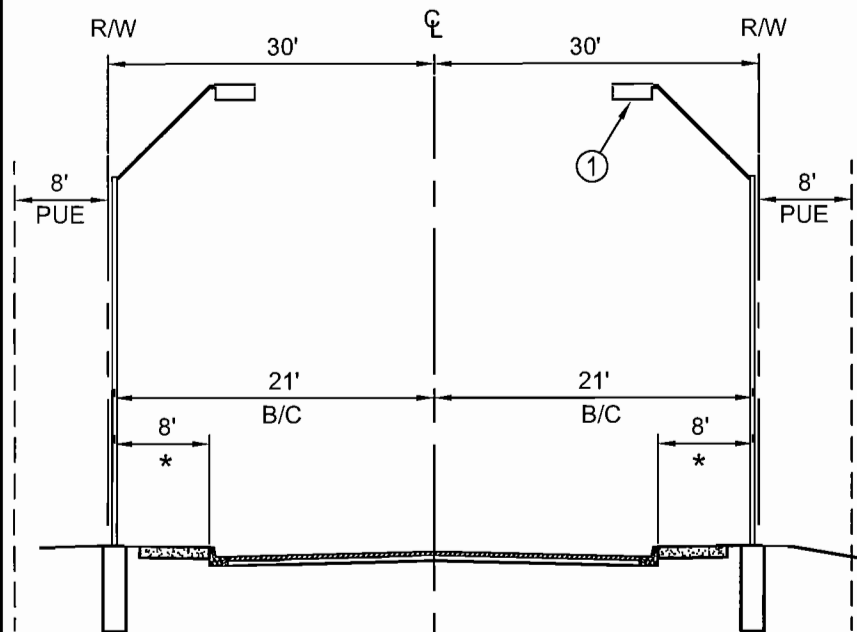
DETAIL NO.
A1080



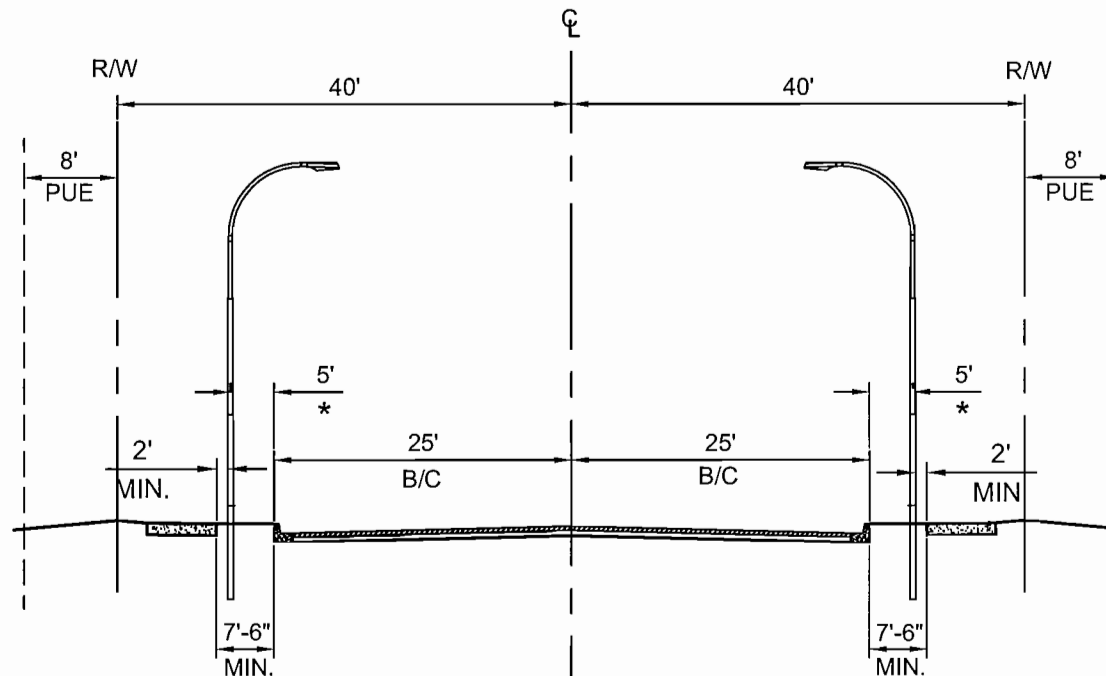
CITY OF AVONDALE
STANDARD DETAIL

**PREFERRED STREET LIGHT
LOCATION (LOCALS)**

APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



A1002 INDUSTRIAL COLLECTOR SECTION



A1003 MINOR COLLECTOR SECTION

UNLESS OTHERWISE NOTE:

COMMERCIAL / INDUSTRIAL COLLECTOR STREET TO USE SHOE BOX STYLE

- ① IN SOME CASES, AT THE DIRECTION OF THE CITY ENGINEER, STREET LIGHTS MAY ONLY BE REQUIRED ON ONE SIDE.

* DIMENSION TO CENTER OF POLE

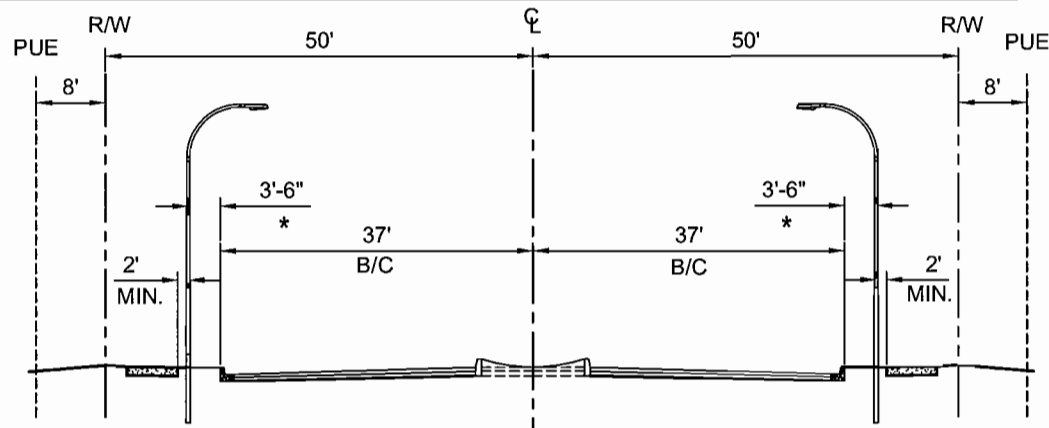
DETAIL NO.
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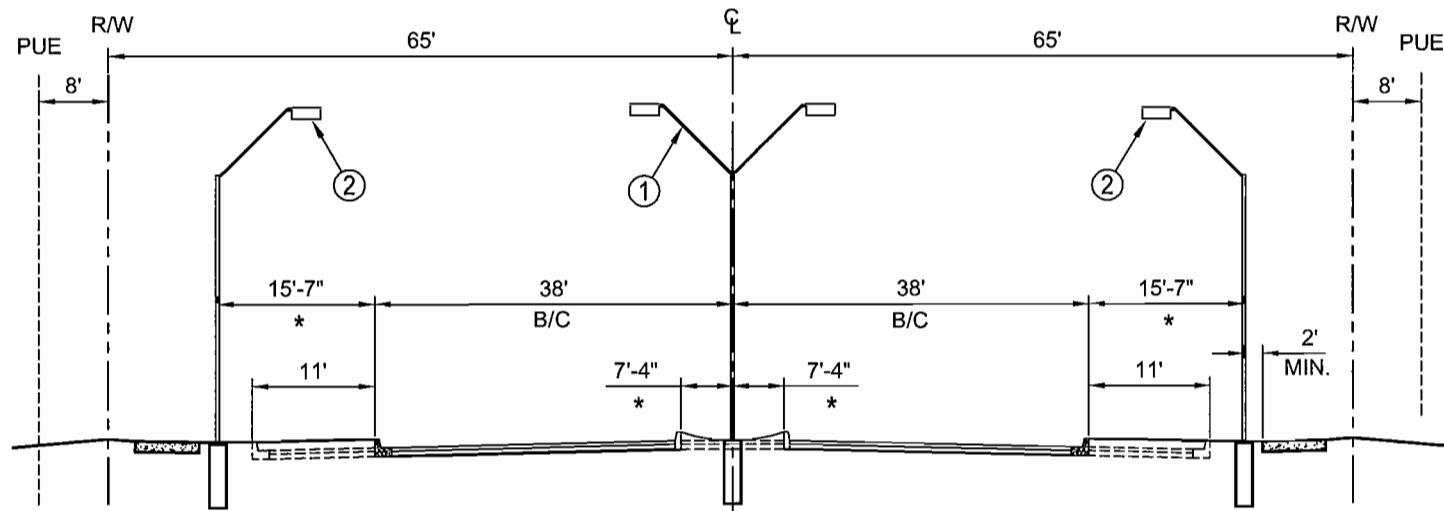
**CITY OF AVONDALE
STANDARD DETAIL**

**PREFERRED STREET LIGHT
LOCATION (COLLECTORS)**

APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



A1004 MAJOR COLLECTOR SECTION



A1006 PHASED ARTERIAL OUTSIDE WIDENING SECTION

- ① MEDIAN PLACEMENT IS THE PREFERRED LOCATION FOR STREET LIGHTS.
- ② ALTERNATE PLACEMENT OF STREET LIGHTS IS BEHIND CURB AND GUTTER.

* DIMENSION TO CENTER OF POLE

DETAIL NO.

A1082

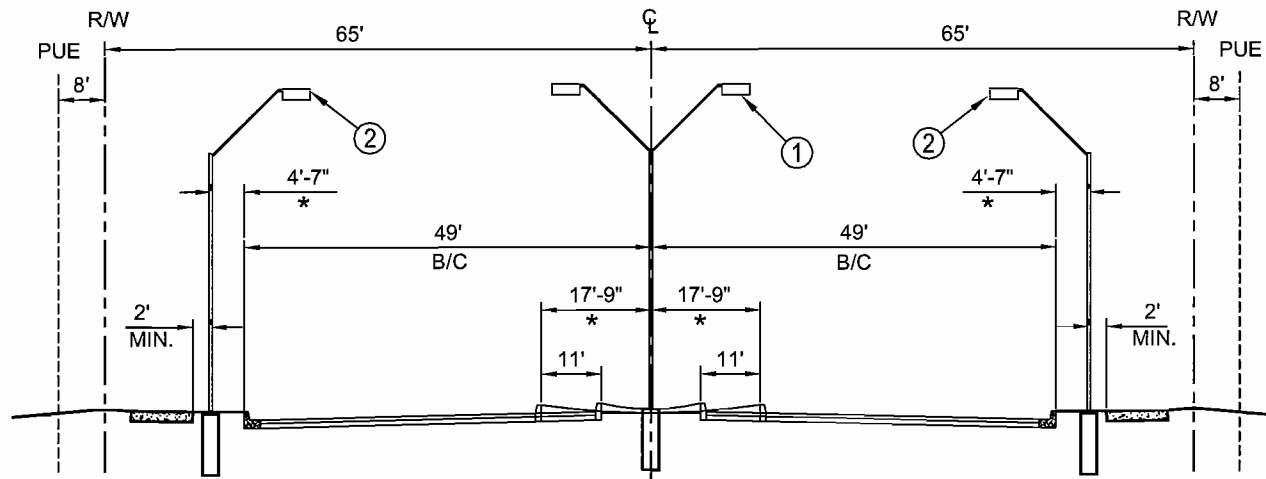


**CITY OF AVONDALE
STANDARD DETAIL**

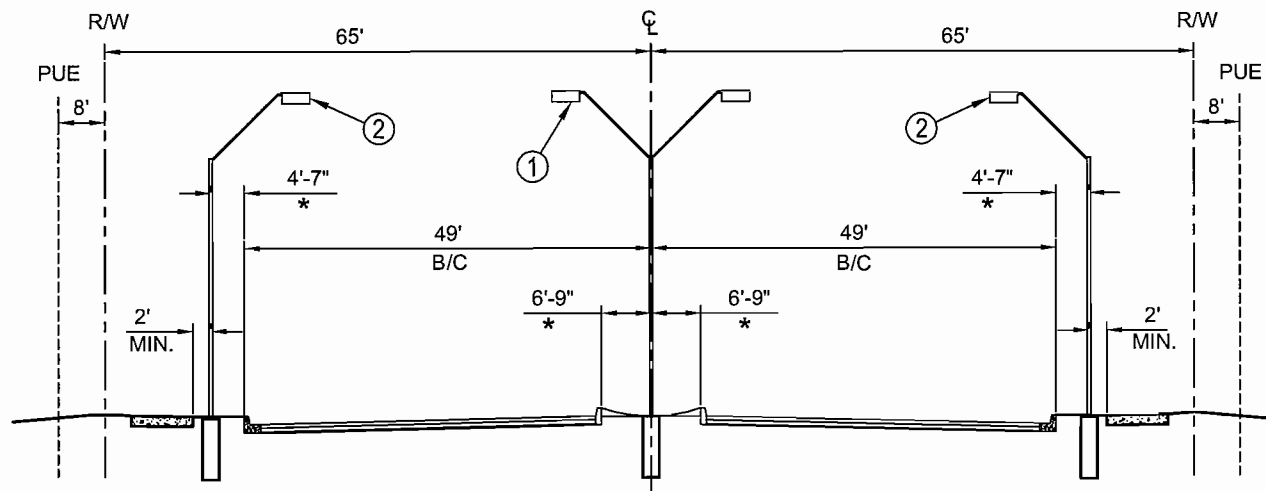
**PREFERRED STREET LIGHT LOCATION
(COLLECTOR / ARTERIAL)**

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



A1005 PHASED ARTERIAL INSIDE WIDENING SECTION



A1007 ARTERIAL SECTION

- ① MEDIAN PLACEMENT IS THE PREFERRED LOCATION FOR STREET LIGHTS.
- ② ALTERNATE PLACEMENT OF STREET LIGHTS IS BEHIND CURB AND GUTTER.

* DIMENSION TO CENTER OF POLE

DETAIL NO.

A1083



**CITY OF AVONDALE
STANDARD DETAIL**

**PREFERRED STREET LIGHT
LOCATION (ARTERIALS)**

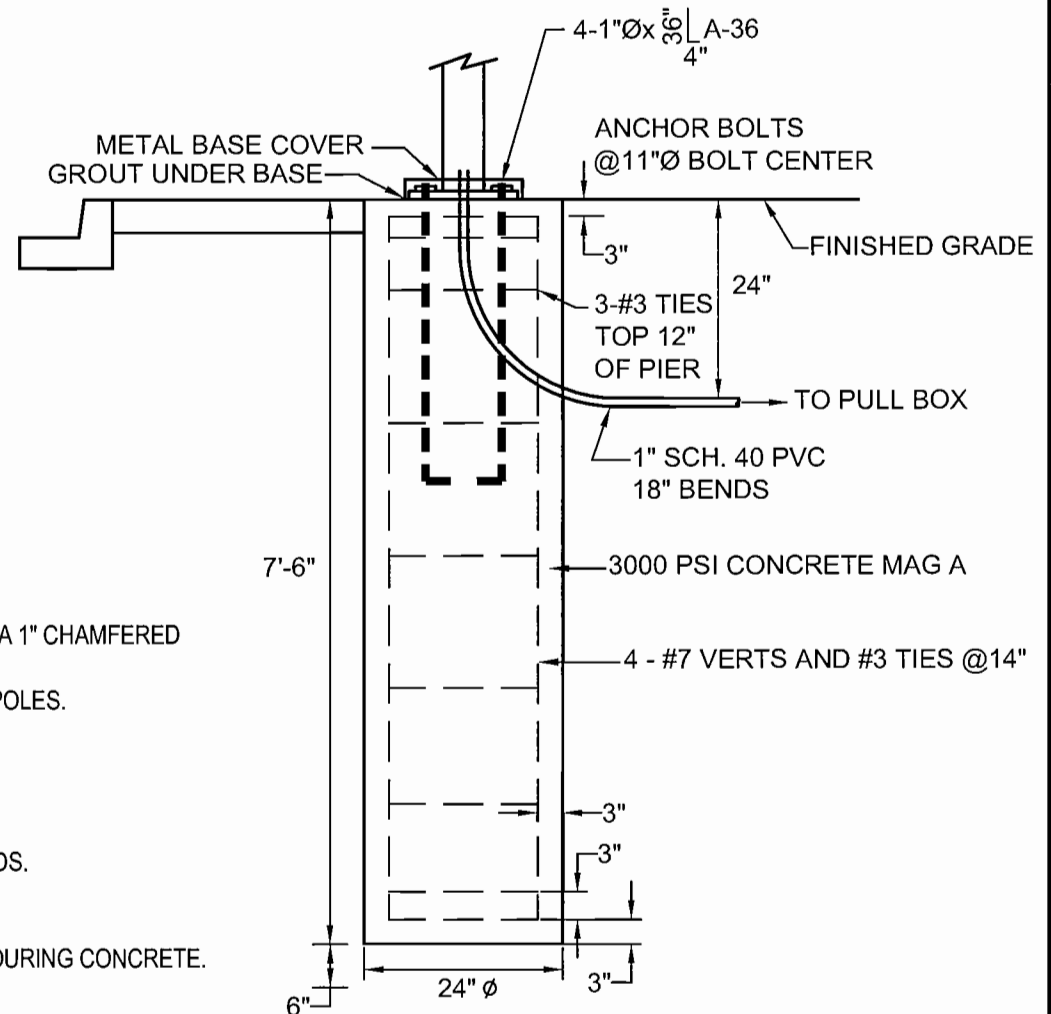
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DATE:

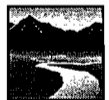
Daniel W. Fitzhugh
04-07-08

NOTES:

1. REINF A615 GRADE 60 EXCEPT #3 GRADE 40
2. TOP OF FOUNDATION SHALL BE FINISHED WITH A SMOOTH SURFACE WITH A 1" CHAMFERED EDGE.
3. POLE FOUNDATION SHALL CURE FOR 14 DAYS BEFORE INSTALLING LIGHT POLES.
4. ALL FINISHED POLE FOUNDATIONS SHALL BE AT SIDEWALK GRADE.
5. ANCHOR BOLTS SHALL BE FULLY GALVINIZED PER ASTM A-153.
6. CONCRETE PLACEMENT SHALL FOLLOW MAG SPECIFICATIONS.
7. DO NOT FREEFALL CONCRETE IN EXCESS OF 5'.
8. A VIBRATOR SHALL BE USED TO DISTRIBUTE CONCRETE & REDUCE AIRVOIDS.
9. MAXIMUM SLUMP SHALL NOT EXCEED 5".
10. GROUT BASE AFTER POLE HAS BEEN LEVELED.
11. TOP 1' OF FOUNDATION SHALL HAVE A 24" Ø SONATUBE IN PLACE WHEN POURING CONCRETE. REMOVE FORM AFTER CONCRETE HAS CURED.



DETAIL NO.
A1084-1



**CITY OF AVONDALE
STANDARD DETAIL**

SHOE BOX STYLE STREET LIGHT FOUNDATION

APPROVED BY:

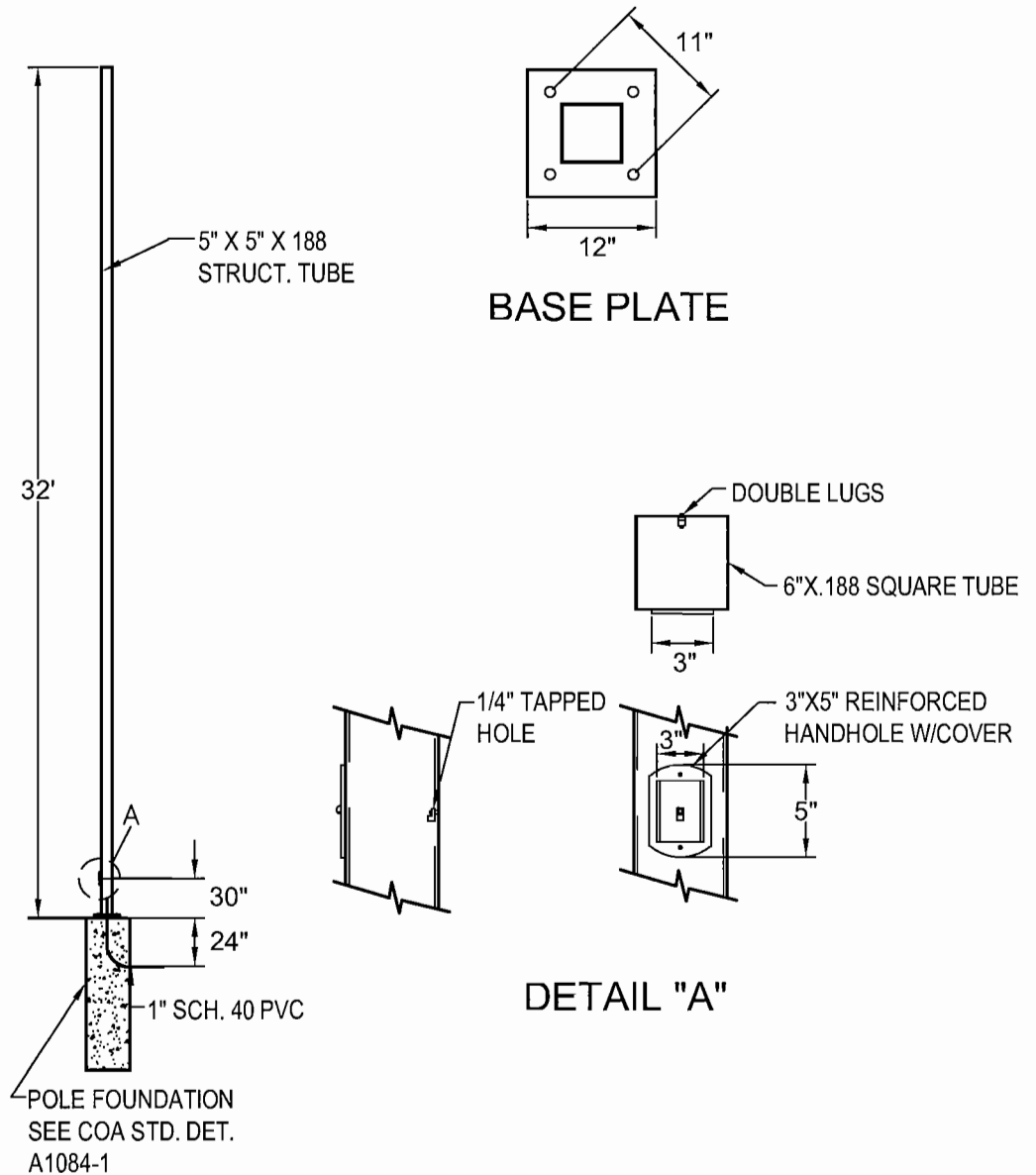
Daniel W. Fitzhugh

DATE:

04-07-08

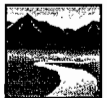
NOTES:

1. ALL WELDS SHALL BE GROUND SMOOTH, AND ALL BURRS AND SHARP EDGE SHALL BE REMOVED PRIOR TO PAINTING.
2. ALL HARDWARE IS TO BE FURNISHED WITH POLE. HARDWARE SHALL BE CORROSION RESISTANT.
3. SURFACES TO BE PAINTED SHALL BE CLEANED OF ALL RUST, SCALE, FOREIGN MATERIAL, OIL, AND GREASE.
4. PRIMER COAT IS TO BE INTEGARD 475 EPOXY, OR APPROVED EQUIVALENT, APPLIED TO ENTIRE POLE. MINIMUM DRY COAT THICKNESS SHALL BE 2-3 MIL.
5. FINISH COAT SHALL BE VALSPAR 54 SERIES URETHANE (BRONZE), OR APPROVED EQUIVALENT. MINIMUM DRY COAT THICKNESS TO BE 4 MILS.
6. INSTALL GROUNDING CONNECTOR, ILSKO TA6-S OR EQUIVALENT WITH 1/4" ROUNDHEAD ALLEN DRIVE MACHINE SCREW AND NUT.
7. BASE PLATE SHALL BE 1"X12"X12" WITH 1-1/16"Ø HOLES ON 11" B.C.



DETAIL NO.

A1084-2

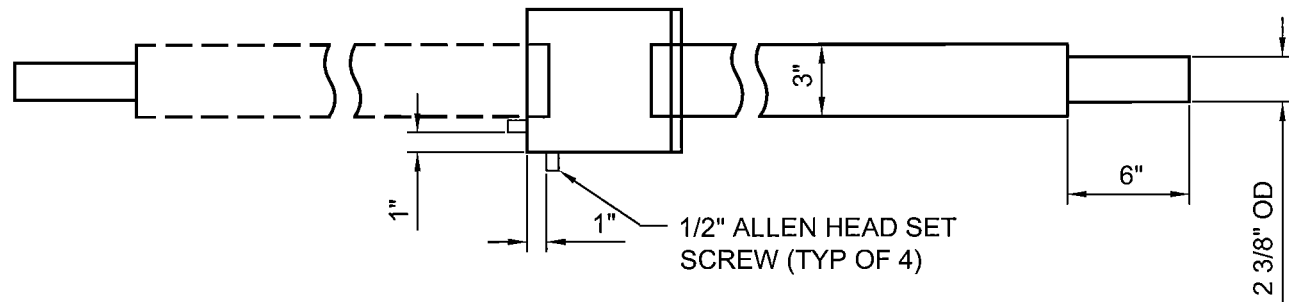


**CITY OF AVONDALE
STANDARD DETAIL**

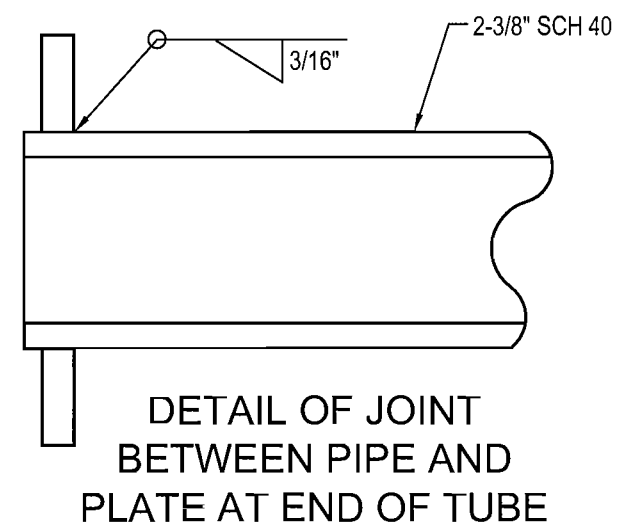
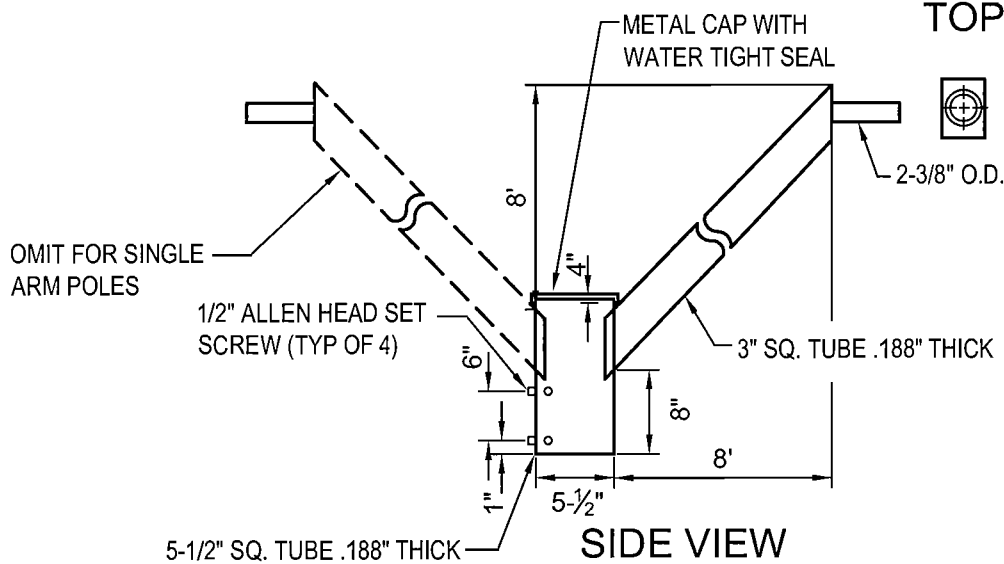
SHOE BOX STYLE STREET LIGHT POLE

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



TOP VIEW



NOTES:

1. ALL WELDS SHALL BE GROUND SMOOTH, AND ALL BURRS AND SHARP EDGES SHALL BE REMOVED PRIOR TO PAINTING.
2. SURFACES TO BE PAINTED SHALL BE CLEANED OF ALL RUST, SCALE, FOREIGN MATERIAL, OIL, AND GREASE.
3. FINISH COAT SHALL BE VALSPAR 54 SERIES URETHANE (BRONZE) OR APPROVED EQUIVALENT.
4. USE WITH A-1000 ON COMMERCIAL COLLECTORS AND ARTERIAL STREETS.

DETAIL NO.

A1084-3



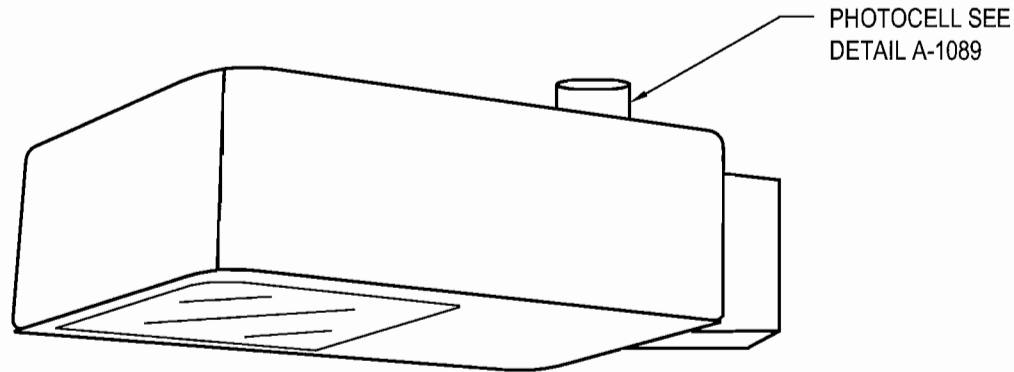
CITY OF AVONDALE
STANDARD DETAIL

SHOE BOX STYLE STREET LIGHT MAST ARM

APPROVED BY:

DATE:

Daniel W. Fitzhugh
04-07-08



NOTES:

1. HOUSING SHALL BE OF ONE PIECE, FORMED ALUMINUM ON UPPER PORTION OF UNIT. DOOR FRAME TO BE MANUFACTURED OF EXTRUDED ALUMINUM WITH CONCEALED HINGES AND TWO QUICK RELEASE LATCHES. UNIT SHALL HAVE PLUG IN STARTER.
2. FINISH - EXTERNAL FINISH SHALL BE OF THERMOSET ENAMEL, BRONZE IN COLOR.
3. ALL FIXTURES SHALL BE SUPPLIED WITH PHOTOCELL SOCKET, PHOTOCELL AND LAMP.
4. ALL FIXTURES SHALL HAVE A DECAL SHOWING WATTAGE OF FIXTURE WITH 2" BLACK LETTERING ON YELLOW BACKGROUND ATTACHED BETWEEN LENSE AND POLE ON BOTTOM OF FIXTURE. THIS DECAL SHALL BE VISIBLE FROM THE STREET.

APPROVED MANUFACTURERS ARE:
 GE LIGHTING SYSTEMS
 DSMF25SOA2GMC3DBC, 120/208/240/277 VOLT BALLAST (250 WATT)

AMERICAN ELECTRIC
 U-530069 120/208/240/277 VOLT BALLAST (250 WATT)
 OR CITY APPROVED EQUALS

DETAIL NO.

A1084-4

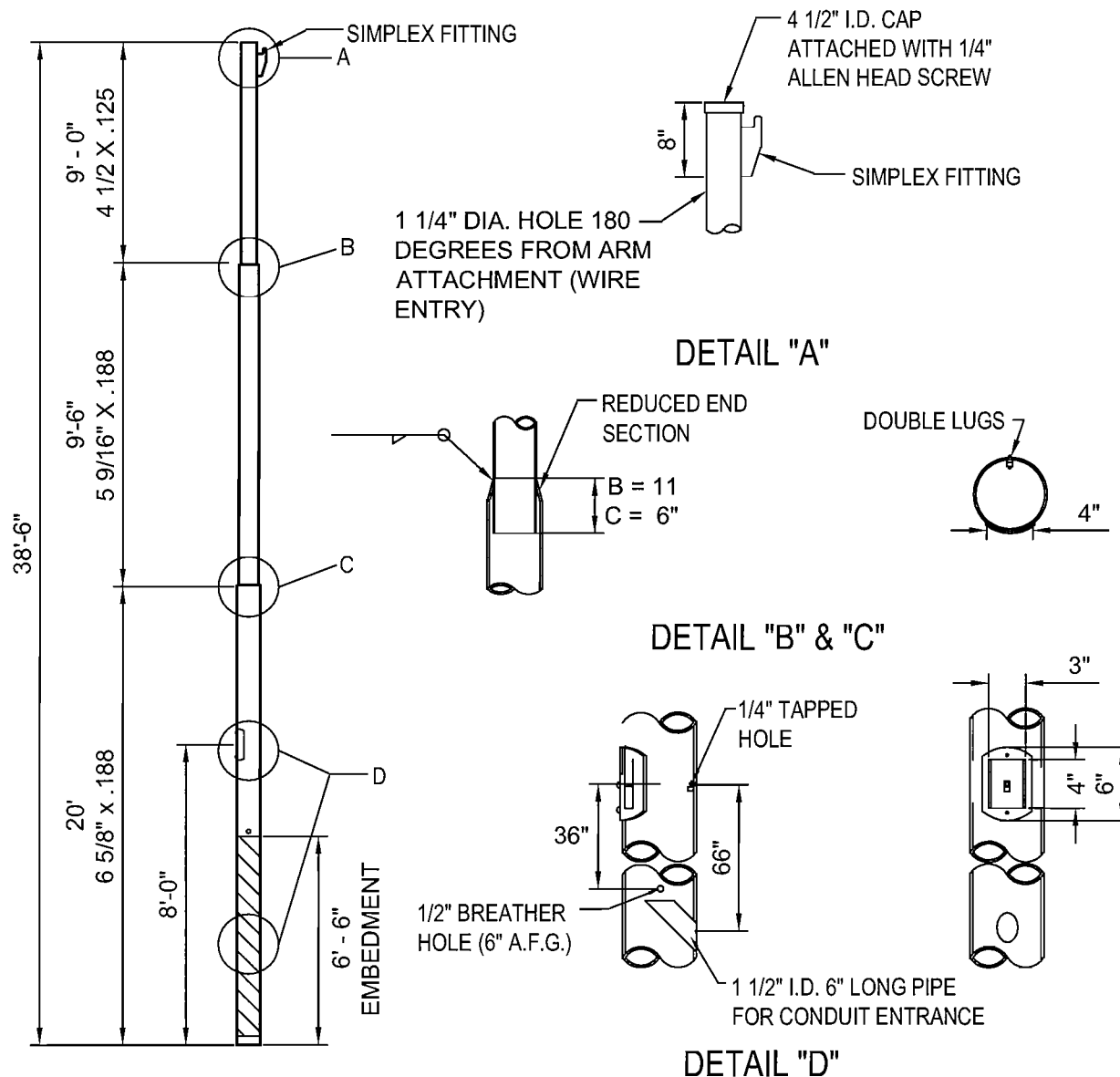


**CITY OF AVONDALE
 STANDARD DETAIL**

**SHOE BOX STYLE
 STREET LIGHT FIXTURE**

APPROVED BY:

Daniel W. Fitzhugh
 DATE: 04-07-08



NOTES:

1. CONDUIT ENTRANCE TO BE MADE OF 1 1/2" MIN. I.D. PIPE. IT SHALL BE FLUSH WITH FACE OF POLE AND WELDED AT A 45 DEGREE ANGLE. REMOVE ALL BURRS.
2. THE HAND HOLE TO BE 4" X 3" WITH 1 1/2" RADII. THE HAND HOLE COVER TO BE 4" X 6" X 16 GAUGE WITH 2" RADII AND BENT SLIGHTLY SMALLER THAN THE POLE. THE COVER IS TO BE SECURED WITH (2) 1/4" STAINLESS STEEL TAMPER PROOF SCREWS, SUPPLIED BY MANUFACTURER.
3. AFTER FABRICATION, THE POLE SHALL BE SANDBLASTED TO REMOVE ALL LOOSE SCALE, RUST, CORROSION PRODUCTS, GREASE, DIRT, AND OTHER FOREIGN PRODUCTS.
4. AFTER SANDBLASTING THE POLE SHALL BE GALVANIZED PER ASTM A123, LATEST EDITION, ZINC (HOT GALVANIZED) COATING ON THE PRODUCTS FABRICATED FROM ROLLED, PRESSED AND FORGED STEEL, PLATES, BARS AND STRIPS.
5. AFTER GALVANIZING, THE BOTTOM 7 FEET OF POLE SHALL BE CONFORMABLY HALF LAP TAPED WITH SCOTCH 50 CORROSION PROTECTION TAPE OR EQUIVALENT.

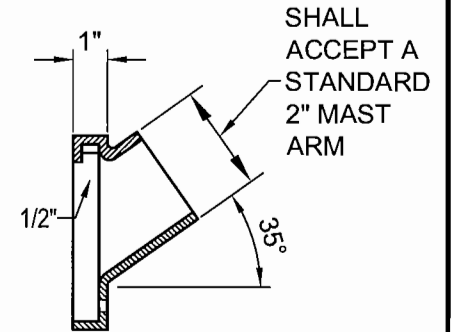
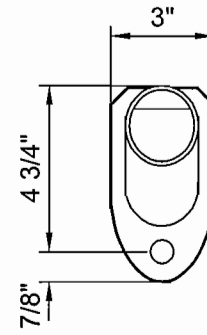
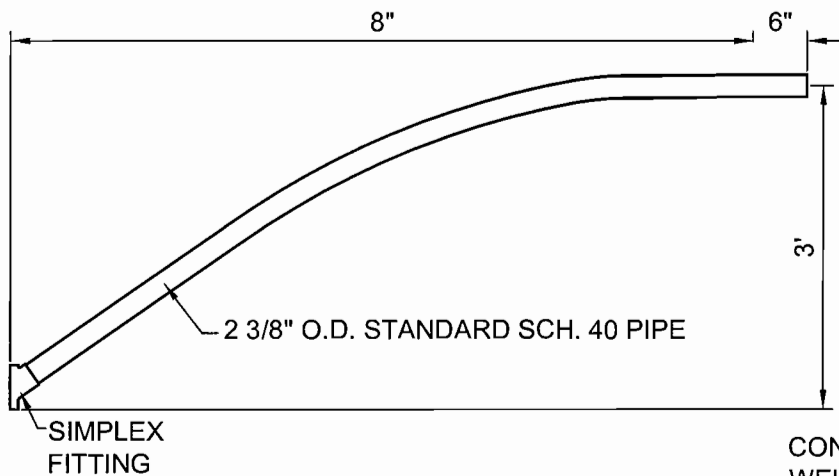
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A1085-1



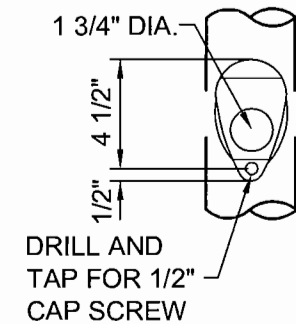
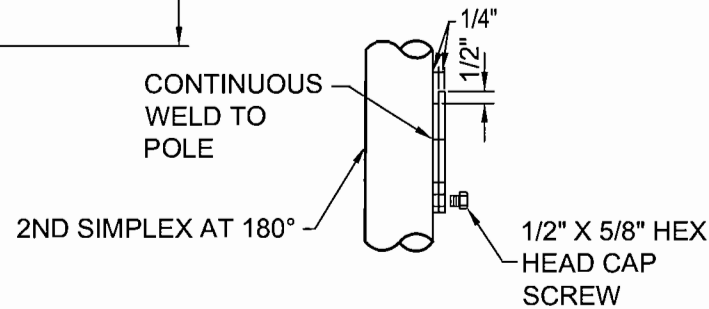
**CITY OF AVONDALE
STANDARD DETAIL**

**APS STREET
LIGHT POLE**

APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



FEMALE SIMPLEX



MALE SIMPLEX

NOTES:

1. ALL WELDS SHALL BE GROUND SMOOTH, AND ALL BURRS AND SHARP EDGES SHALL BE REMOVED PRIOR TO GALVANIZING.
2. SURFACES TO BE GALVANIZED SHALL BE CLEANED OF ALL RUST, SCALE, FOREIGN MATERIAL, OIL, AND GREASE.
3. FINISH COAT SHALL BE GALVANIZED PER ASTM A-123 OR APPROVED EQUIVALENT.
4. USE WITH A-1085-1.

DETAIL NO.

A1085-2



**CITY OF AVONDALE
STANDARD DETAIL**

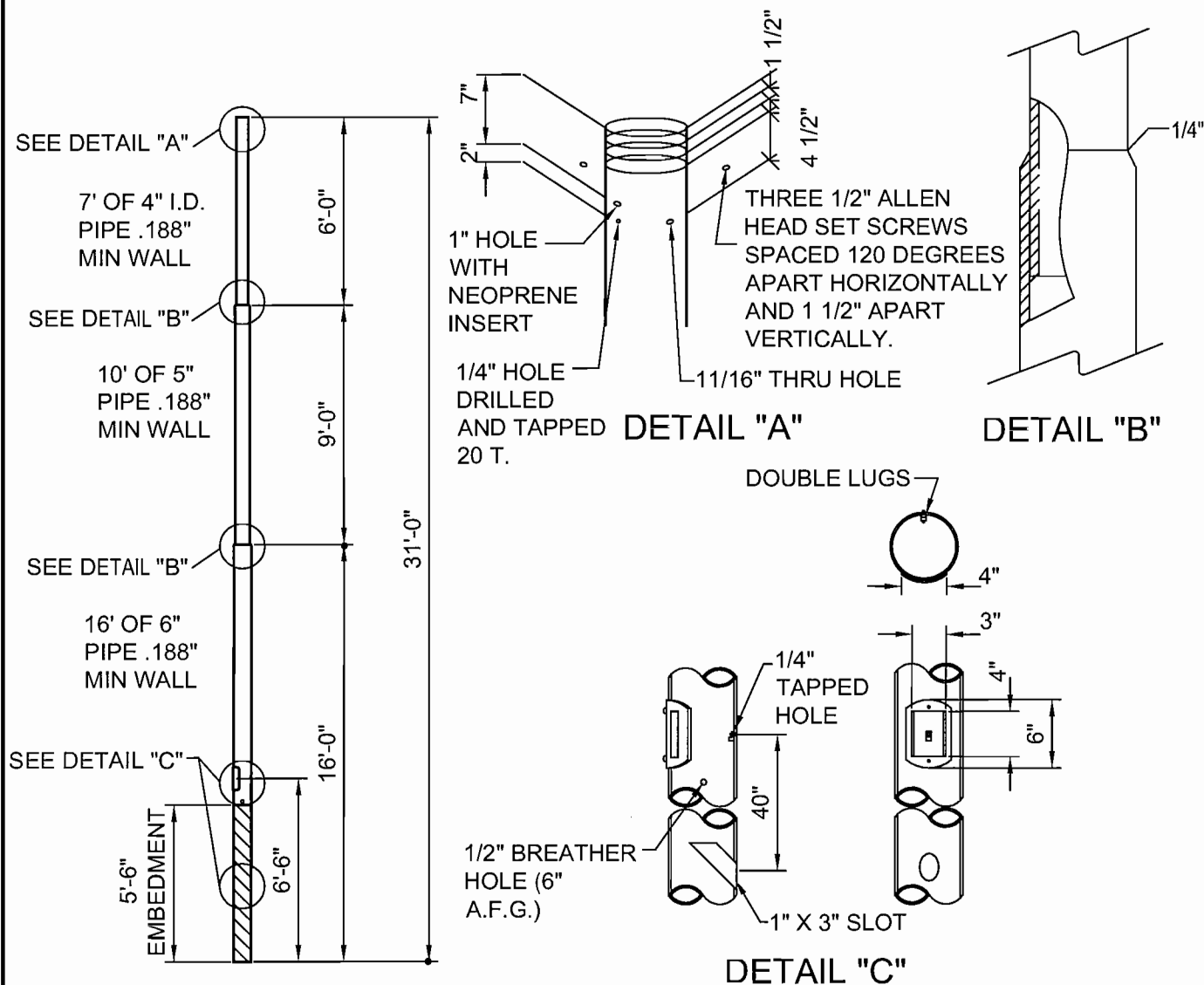
**APS STREET LIGHT
MAST ARM**

APPROVED BY:

Daniel W. Fitzgibbon

DATE:

04-07-08

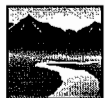


NOTES:

1. ALL WELDS SHALL BE GROUND SMOOTH, AND ALL BURRS AND SHARP EDGES SHALL BE REMOVED PRIOR TO PAINTING.
2. ALL HARDWARE IS TO BE FURNISHED WITH POLE. HARDWARE SHALL BE CORROSION RESISTANT.
3. SURFACES TO BE PAINTED SHALL BE CLEANED OF ALL RUST, SCALE, FOREIGN MATERIAL, OIL AND GREASE.
4. PRIMER COAT IS TO BE URECAL NO. 1001, OR APPROVED EQUIVALENT, APPLIED TO ENTIRE POLE. MINIMUM DRY COAT THICKNESS SHALL BE 1 MIL.
5. AFTER THE POLE HAS BEEN PRIME COATED, THE POLE BUTT SHALL BE CONFORMABLY HALF LAP TAPED WITH SCOTCH 50 CORROSION PROTECTION TAPE, OR EQUIVALENT, FROM A POINT 2" BELOW THE BREATHER HOLE TO THE BOTTOM OF THE POLE.
6. FINISH COAT SHALL BE URECAL 9179 (GRAY) OF 96104 (BLACK), OR APPROVED EQUIVALENT, APPLIED FROM THE TOP OF THE POLE TO A POINT ONE FOOT BELOW THE BREATHER HOLE. MINIMUM DRY COAT THICKNESS TO BE 2 MILS.
7. INSTALL GROUNDING CONNECTOR, ILSCO TA6-S OR EQUIVALENT WITH 1/4" ROUNDHEAD ALLEN DRIVE MACHINE SCREW AND NUT.
8. FASTEN COVERPLATE WITH 1/4" ROUNDHEAD ALLEN DRIVE MACHINE SCREWS. POLE TO BE DRILLED AND TAPPED TO ACCEPT THIS SCREW.

DETAIL NO.

A1086-1



**CITY OF AVONDALE
STANDARD DETAIL**

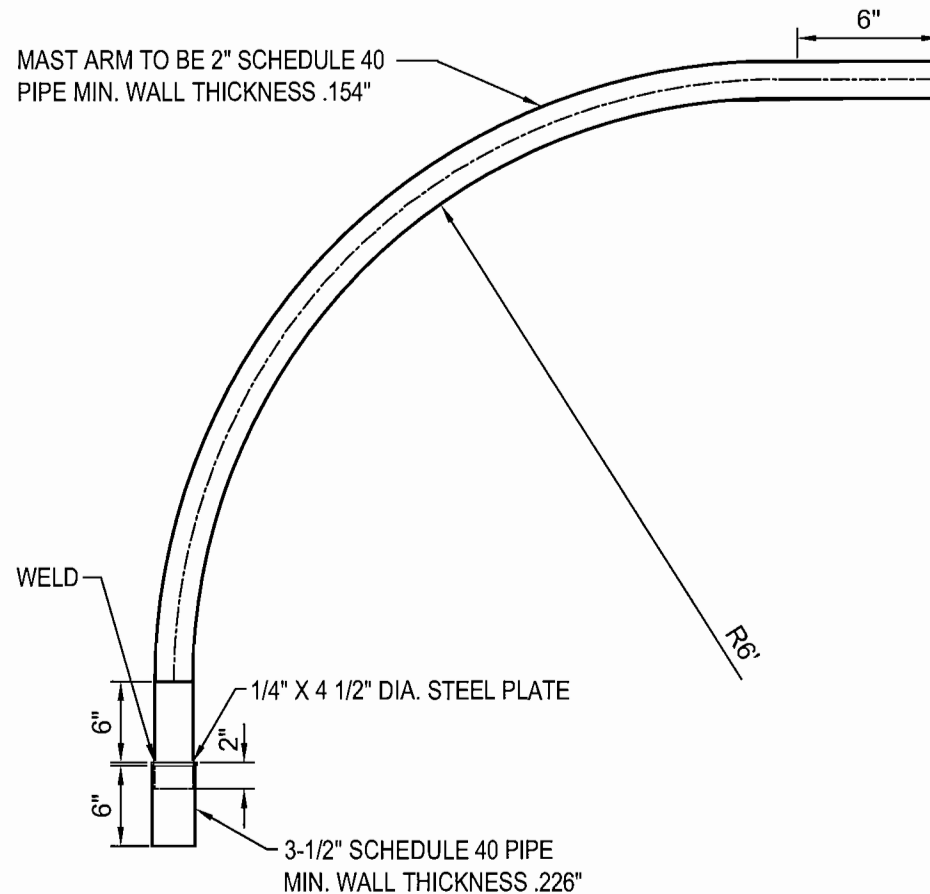
SRP STREET LIGHT POLE

APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08



NOTES:

1. ALL WELDS SHALL BE GROUND SMOOTH, AND ALL BURRS AND SHARP EDGES SHALL BE REMOVED PRIOR TO GALVANIZING.
2. SURFACES TO BE GALVANIZED SHALL BE CLEANED OF ALL RUST, SCALE, FOREIGN MATERIAL, OIL, AND GREASE.
3. FINISH COAT SHALL BE GALVANIZED PER ASTM A-123 OR APPROVED EQUIVALENT.
4. USE WITH A1086-1.

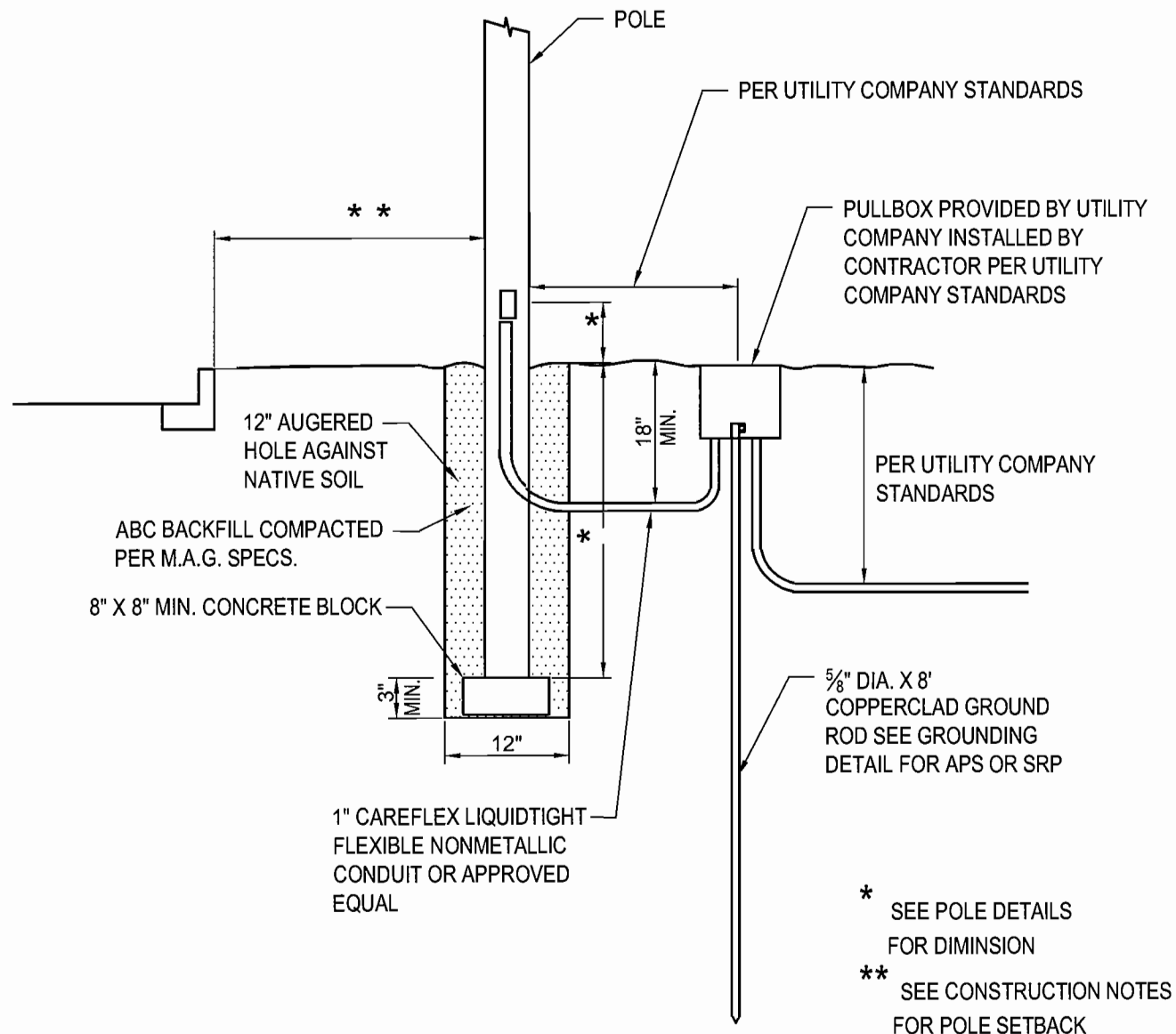
DETAIL NO.
A1086-2



**CITY OF AVONDALE
STANDARD DETAIL**

**SRP STREET LIGHT
MAST ARM**

APPROVED BY:
Daniel W. Fitzhugh
DATE: 04-07-08



- * SEE POLE DETAILS FOR DIMENSION
- ** SEE CONSTRUCTION NOTES FOR POLE SETBACK

DETAIL NO.

A1087



**CITY OF AVONDALE
STANDARD DETAIL**

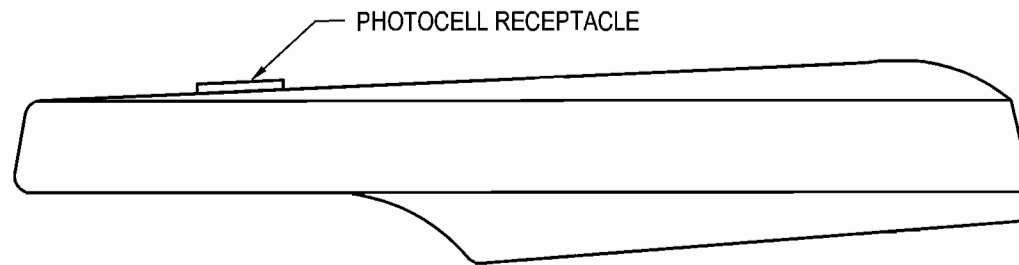
STREET LIGHT EMBEDMENT DETAIL

APPROVED BY:

Daniel W. Fitzhugh

DATE:

04-07-08



FIXTURE HOUSING SHALL BE OF DIE CAST ALUMINUM WITHOUT SEAMS OR WELDS ON UPPER HALF OF UNIT. ALL ELECTRICAL COMPONENTS SHALL BE SECURELY ATTACHED TO THE UPPER HALF OF THE UNIT. ALL ELECTRIC COMPONENTS SHALL BE SECURELY ATTACHED TO THE UPPER HALF OF THE UNIT. LOWER HALF OF HOUSING SHALL BE HINGED ON INTEGRALLY CAST PIN HINGE AND SECURED WITH LATCH FOR ONE HANDED OPERATION. FIXTURE SHALL INCLUDE REMOVABLE BALLAST TRAY. EXTERNAL FINISH SHALL BE BAKED ENAMEL, COLOR TO MATCH POLE, APPLIED BY ELECTROSTATIC PROCESS.

MOUNTING SHALL BE BY INTEGRAL SLIP FITTER FOR 1-3/8" TO 2-3/8" DIAMETER MAST ARMS.

FIXTURE SHALL MEET I.E.S. TYPE II OR III MEDIUM CUT-OFF.

APPROVED MANUFACTURERS:

GENERAL ELECTRIC

100 WATT HPS - M2AC10S0A2GMC22

150 WATT HPS - M2AC15S0A2GMC32

250 WATT HPS - M2AC25S0A2GMC32

OR CITY APPROVED EQUAL

ALL FIXTURES MUST BE SUPPLIED WITH PHOTOCELL RECEPTACLE, PHOTOCELL AND LAMP.

FIXTURE SHALL HAVE A PLUG-IN STARTER/IGNITOR AND A HPF MULTI-TAP BALLAST.

ALL FIXTURES SHALL HAVE A DECAL SHOWING WATTAGE OF FIXTURE WITH 2" BLACK LETTERING ON YELLOW BACKGROUND ATTACHED BETWEEN LENS AND POLE ON BOTTOM OF FIXTURE. THIS DECAL SHALL BE VISIBLE FROM THE STREET.

DETAIL NO.

A1088

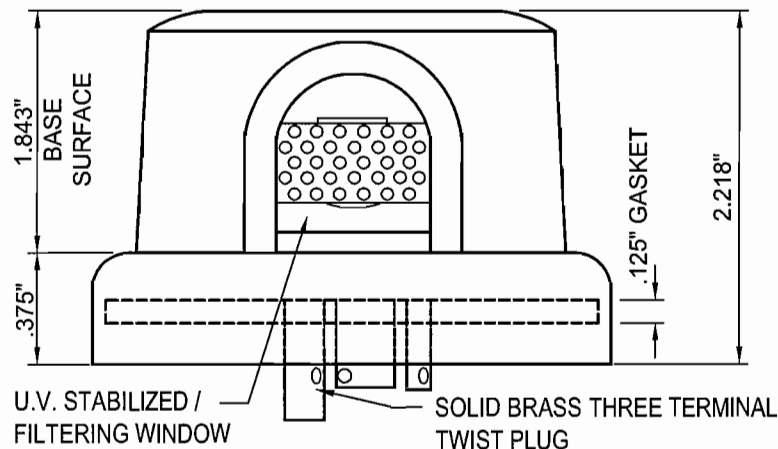


**CITY OF AVONDALE
STANDARD DETAIL**

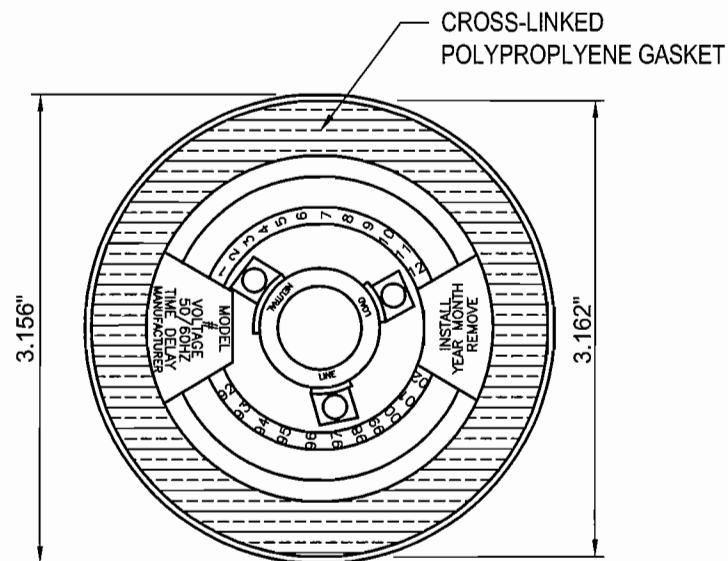
HPS COBRAHEAD FIXTURE

APPROVED BY:

Daniel W. Fitzhugh
DATE: 04-07-08



NORTH SIDE VIEW



BOTTOM VIEW

NOTES:

PHYSICAL:

SIZE SEE DRAWING
 WEIGHT APPROX. 7 OZ. GROSS
 CHASSIS MOLDED PHENOLIC WITH 3 POLE TWISTLOCK PLUG WITH CROSS LINKED POLYETHYLENE GASKET.
 HOUSING U.V. STABILIZED POLYPROPYLENE WITH ACRYLIC WINDOW WITH ULTRAVIOLET INHIBITOR.
 COLOR DARK BRONZE

ELECTRICAL:

SUPPLY VOLTAGE 105-285 VOLTS, 50/60HZ AC
 RATINGS LOAD 1800VA MAX. SPST, N.C.
 INRUSH CURRENT 130 AMPERES AT 120 VOLTS 65 AMPERES AT 240 VOLTS
 OPERATING LEVELS TURN ON AVERAGE 1FC. \pm .2FC
 TURN ON MAXIMUM 1.8FC
 RATIO AVERAGE 3
 CONTROL POWER 3.2 WATTS, MAX. (2.75 AVERAGE) AT 240 VAC.
 DIELECTRICAL STRENGTH 5 KV MIN. BETWEEN ANY CURRENT CARRYING PART AND METAL MOUNTING SURFACE.
 LIGHT ARRESTOR DELUXE-CONTROLLED TYPE EXPULSION ENCLOSED 2.0 KV SPARK OVER MIN. TYPE 10,000 AMPS FOLLOW THROUGH
 PHOTOCELL HERMETICALLY SEALED CDS CELL, MINIMUM SURFACE AREA .75 SQUARE INCHES
 TIME DELAY OFF CYCLE ONLY, 3 TO 30 SECONDS

ENVIRONMENTAL

AMBIENT TEMPERATURE RANGE -65 DEGREES FAHRENHEIT TO +158 DEGREES FAHRENHEIT
 MOISTURE RESISTANCE 100% RELATIVE HUMIDITY

APPROVED MANUFACTURERS:

FISHER PIERCE

120V 7762-EPSTD
 240V 7772-EPSTD

PRECISION

120V 8662-ELTD
 240V 8672-ELTD

DETAIL NO.

A1089

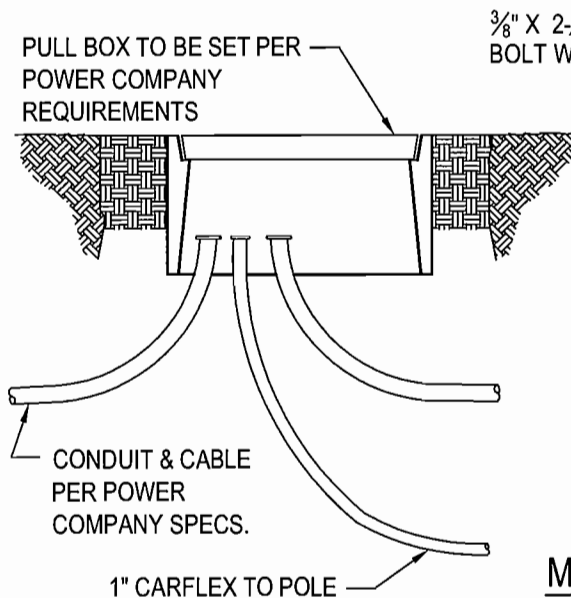


**CITY OF AVONDALE
 STANDARD DETAIL**

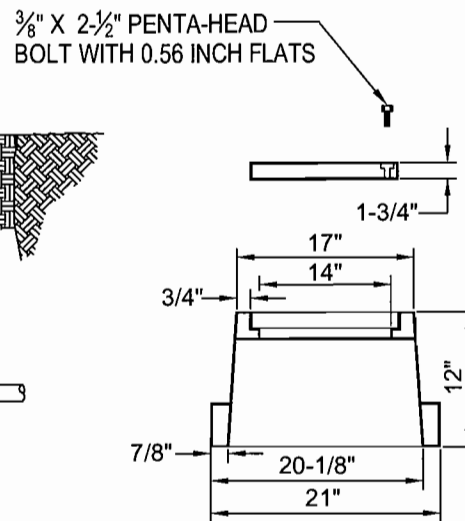
PHOTOCELL

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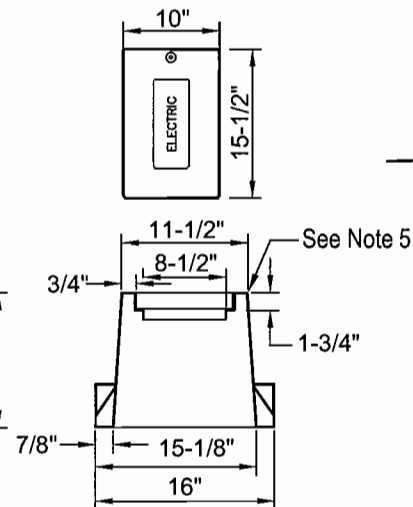
Daniel W. Fitzgough
 DATE: 04-07-08



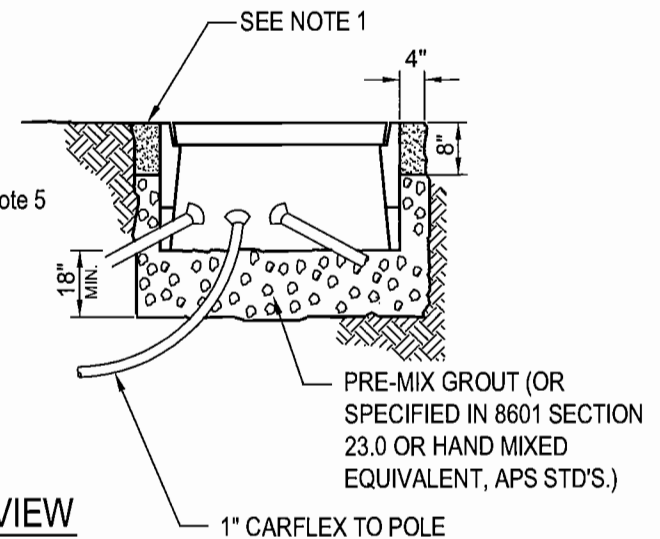
**JUNCTION BOX
INSTALLATION SRP AREA**



MID-SECTION SIDE VIEW



MID-SECTION END VIEW



**JUNCTION BOX
INSTALLATION APS AREA**

NOTES:

1. BACKFILL WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACT.
2. WHERE PULL BOXES ARE INSTALLED IN CONCRETE AREAS, 1/2" PRE-MOLDED EXPANSION JOINT SHALL BE INSTALLED AROUND PULL BOX.
3. CONDUCTORS SHALL HAVE A MINIMUM OF 36" SLACK FROM CONDUIT AND BELL.
4. WHERE A PULL BOX EXTENSION IS NEEDED, TWO PULL BOXES MAY BE STACKED ONE ON TOP OF ANOTHER.
5. HANDHOLES ARE TO BE INSTALLED FLUSH WITH FINAL GRADE.
6. INSTALL THIS NONTRAFFIC-BEARING HANDHOLE OUTSIDE OF CONCRETED AREAS, OR PEDESTRIAN AND VEHICULAR TRAFFIC AREAS.
7. COMPACTION BENEATH AND AROUND HANDHOLE SHALL BE A MINIMUM OF 85 PERCENT OF THE MAXIMUM DENSITY PER MAG SPECIFICATIONS..
8. DIMENSIONS ARE APPROXIMATE DUE TO VARIATIONS BETWEEN MANUFACTURERS.
9. THIS HANDHOLE IS SUITABLE FOR USE WITHOUT JUNCTION BARS OR WITH THE TWO-POSITION JUNCTION BARS OR FOR MAINTENANCE OF HANDHOLES EXISTING WITH FOUR-POSITION JUNCTION BARS.

DETAIL NO.

A1090

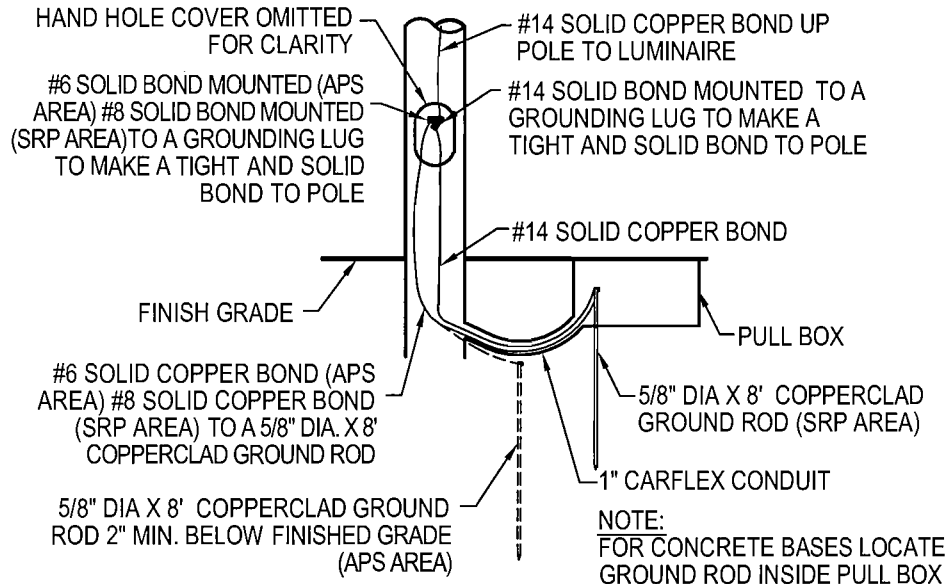


**CITY OF AVONDALE
STANDARD DETAIL**

JUNCTION BOX DETAILS

APPROVED BY:

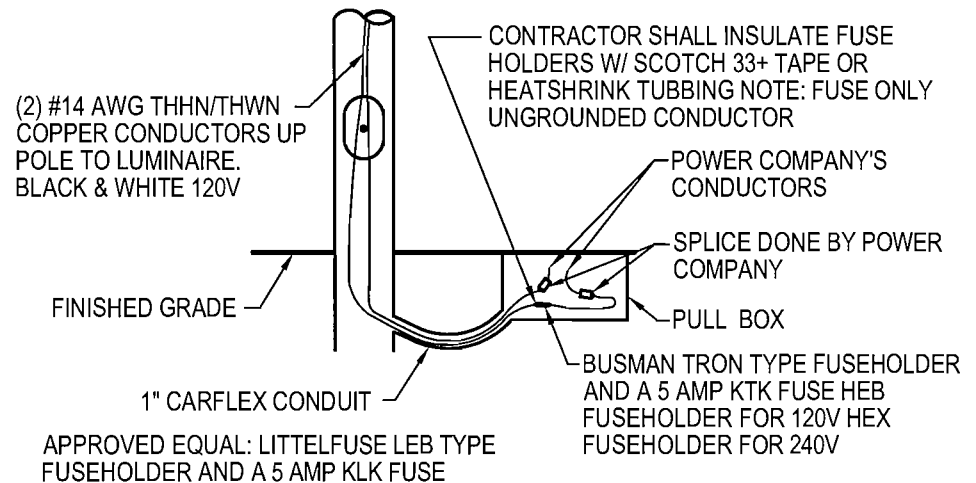
Daniel W. Fitzhugh
DATE: 04-07-08



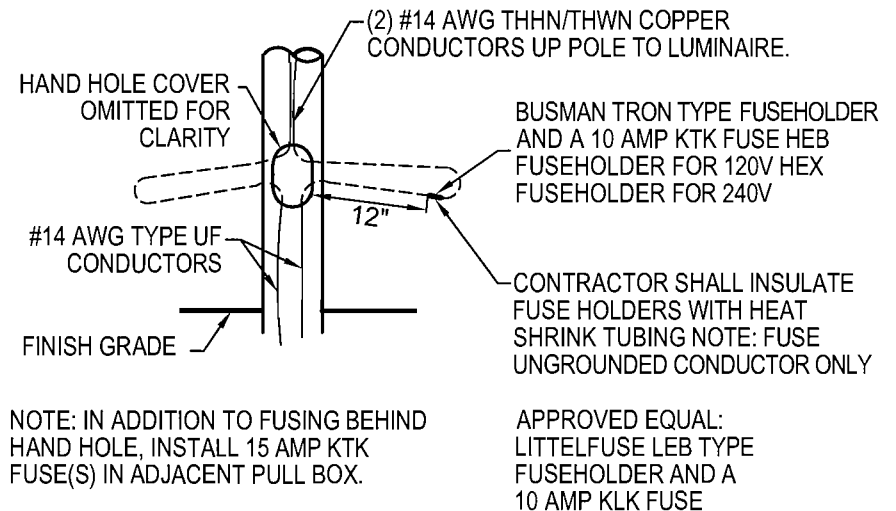
POLE GROUNDING DETAIL

NOTES:

1. ALL SPLICES SHALL BE DONE USING A BLACKBURN WR-7, WR-9, WR-189, OR WR-279 H TYPE CRIMP CONNECTOR. CRIMPING SHALL BE DONE USING A BURNDY TOOL NO. OS-50 WITH 5/8" DIE SHALL BE USED TO CRIMP THE WR-7 WR-9. A BURNDY TOOL NO. MD6-8 WITH O DIE SHALL BE USED TO CRIMP THE WR-189. A BURNDY TOOL NO. MD6-8 WITH D3 DIE SHALL BE USED TO CRIMP THE WR-279.
2. ALL POLES (APS AREA) SHALL BE WIRED USING TWO (2) #14 AWG TYPE THHN/THWN SOLID COPPER CONDUCTORS, 600 VOLT, NEC APPROVED AND ONE (1) #14 SOLID BARE COPPER BOND WIRE. WIRES SHALL RUN FROM THE LUMINAIRE TO A MINIMUM OF TWELVE (12) INCHES BELOW POLE HAND HOLE, FOR TERMINATION.
3. ALL POLES (SRP AREA) SHALL BE WIRED USING TWO (2) #14 AWG TYPE THHN/THWN SOLID COPPER CONDUCTORS, 600 VOLT, NEC APPROVED AND ONE (1) #14 SOLID BARE OR GREEN COPPER BOND WIRE. BOND WIRE SHALL RUN FROM THE LUMINAIRE TO A MINIMUM OF TWELVE (12) INCHES BELOW POLE HAND HOLE, FOR TERMINATION. CONDUCTORS SHALL RUN FROM LUMINAIRE TO PULL BOX.
4. ALL STREETLIGHT CONDUCTORS AND BOND WIRES SHALL BE COPPER. CONDUCTORS FROM PULL BOX TO HAND HOLE SHALL BE AWG TYPE UF INSULATION. CONDUCTORS FROM HAND HOLE TO LUMINAIRE SHALL BE AWG TYPE THHN/THWN. ALL CONDUCTORS SHALL BE STRANDED AND ALL BOND WIRES SHALL BE SOLID.



POLE FUSING DETAIL (SRP)



POLE FUSING DETAIL (APS)

DETAIL NO.
A1091



CITY OF AVONDALE
STANDARD DETAIL

FUSING AND GROUNDING DETAILS

APPROVED BY:
Daniel W. Fitzhugh
DATE:
04-07-08